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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

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AGRICULTURE LIBRARY

FOR IMMEDIATE RELEASE

Dairy Weigh-Day, Culling Poor Cows Can Stretch Short Winter Hay Supply

URBANA--Culling low-profit cows from the dairy herd is probably the best way for dairymen to stretch a short winter hay supply, according to Gary Harpestad, University of Illinois dairy scientist. Feeding more grain may be another possibility.

Harpestad points out that hay will be in short supply in most parts of Illinois this winter. Prices are high.

"Guernseys and Jerseys that are producing less then 5,000 pounds of milk a year should be candidates for slaughter to make more feed available for high producers in the herd," Harpestad explains. "The same goes for Holsteins that are producing less than 7,000 pounds yearly."

Harpestad says one of the best ways to find low producers in the herd is for dairymen to cooperate in the Illinois Dairy Weigh-Day program sponsored by the University of Illinois.

Dairymen throughout the state have received information about Dairy Weigh-Day in the mail. Those who take part in the program on January 15 will receive an estimated lactation record for each of their cows.

Harpestad says the program comes at an ideal time to spot low-producing cows and send them to market. Canner and cutter prices are annually on the upswing from February to May. Fewer cows are sent to market during that period than at any other time of the year.

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Dairymen who have culled low-profit cows from their herds and are still short on hay can substitute some grain for the roughage if prices permit.

Harpestad says it pays to substitute hay in a ration when one pound of a grain mixture containing 700 pounds of ear corn and about 400 pounds of soybean meal costs less than two pounds of hay.

However, cows must receive at least one-half to one pound of hay equivalent for every 100 pounds of body weight per day to maintain normal rumen functions.

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FOR IMMEDIATE RELEASE

Ordering Strawberries? It's Later Than You Think

URBANA--If you haven't already ordered your strawberry plants, place your order right away, advises University of Illinois horticulturist C. C. Zych.

If you're a commercial grower ordering a large quantity or a home gardener wanting a certain variety, you'll have a better choice if you order now. Many nurserymen won't dig more plants than they are reasonably sure of selling, Zych adds.

If you order late you may not get the kind of plants you want, or you may get freshly dug plants rather than the preferred cold-storage plants.

Zych recommends using certified, virus-free plants. Be sure the plants are free of red stele, root-knot nematodes and noxious weeds.

You can get good plants from Arkansas, Maryland, Tennessee, Delaware and Michigan. Be sure to specify delivery dates on the order so that you'll have your plants early enough to set out as soon as weather permits. Planting dates vary a great deal from southern to northern Illinois, Zych says.

On a statewide basis, Zych recommends Pocahontas, Earlidawn and Surecrop. In southern Illinois, Blakemore is still a favorite. Tennessee Beauty does well as a commercial and home garden variety in southern Illinois. But it's best for home use in the northern part of the state.

For northern Illinois, Zych recommends the midseason Catskill, the late-midseason Robinson and the late-season Sparkle varieties.

When buying strawberry plants, buy only from reputable growers, and give them plenty of time on your order, Zych concludes.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE TUESDAY P.M., JANUARY 14, 1964

UI Economist Says Labor Efficiency Is Key Illinois Farm Problem

URBANA--A University of Illinois agricultural economist today said the biggest problem facing Illinois farmers lies in making effective use of labor.

Keynoting the three-day U. of I. Farmstead Mechanization Workshop with a discussion of trends in Illinois agriculture, W. N. Thompson said the labor efficiency problem is so important that it will account for the major change in the basic structure of the state's farms.

"Our economy is one that rewards the labor resource--both physical and managerial--that is fully and efficiently used," Thompson said.

Such figures as the changes in output per man hour in American agriculture or the increase in numbers of persons fed by one farmer are impressive, Thompson explained.

"But such figures overlook the economic fact that many farmers have mechanized to the point where they have only part-time jobs," he added.

"The Illinois farmer must not let past performance, as measured by these poor yardsticks of individual farm efficiency, blind him to the challenge to improve the use of his human resources."

Continuing with other agricultural changes expected to take place in Illinois, Thompson noted that more people living on farms will have important sources of non-farm income.

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"One Illinois farm family in four now has non-farm income that exceeds the gross value of the farm products it produces," Thompson pointed out. "And one farm operator in four works off the farm 100 days or more."

Thompson predicted that government price and income support programs will continue to emphasize land diversion as the means of keeping supplies in balance with use.

"There will be more heavy dependence on direct payments to support farm income," Thompson said. "Government policies and programs for wheat are likely to cause more wheat to be fed, creating a pressure on feed grain prices."

The U. of I. economist noted that beef and hog production will increase more rapidly than population growth in Illinois. He said the state will hold its own as a hog and beef producer, but will need to produce more of its feeder cattle because of the declining supply from the western states.

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FOR IMMEDIATE RELEASE

Professional Farm Managers And Rural Appraisers To Meet At U. Of I. Janauary 30-31

URBANA--Sharing ideas for leasing farm buildings and methods of sharing costs of harvesting and handling corn will highlight the 1964 meeting of the Illinois Society of Professional Farm Managers and Rural Appraisers.

The Society will hold its 36th annual meeting on January 30-31 on the University of Illinois campus. Registration begins at 9 a.m. Thursday, January 30, in the Illini Union building. All persons interested in professional farm management and rural appraisal are invited to attend.

The program will begin Thursday morning when four farm managers explain how they handle the leasing of farm buildings. A discussion period in the afternoon will give members an opportunity to question the morning speakers or to present their own views.

Velmar W. Davis, U. of I. professor of agricultural economics, will speak on cost-sharing methods tenants and landlords use in harvesting and handling corn. Burton W. Ray, U. of I. professor of agronomy, will explain the proposed system for worldwide naming of soils.

Society president Burton L. Hasselberg, Peoria, will conduct the business meeting during the first session Friday morning. A panel discussion following the business meeting will delve into problems and procedures in rural appraising, especially condemnation appraisal.

The annual award luncheon Friday noon completes the program. The Society presents an award each year to recognize an individual's outstanding service to Illinois agriculture.

Program committee members include James W. Stewart, Mattoon, chairman; Wayne Bohlen, Taylorville; Roger E. Gish, Champaign; Eldon H. Greenwood, Springfield; Boyd A. Henry, Champaign; John Hiatt, Shelbyville; S. D. Honn, Decatur; George I. Maxwell, Urbana; Donald M. Nelson, Champaign; and Robert B. Schwart, Urbana.

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FOR RELEASE TUESDAY P.M., JANUARY 14, 1964

Animal Waste "Digester" Described At U. Of I. Mechanization Conference

URBANA--An animal waste "digester" that may be the ultimate answer to the livestock producer's manure-handling problems was described today at a University of Illinois conference.

Speaking before the annual U. of I. Farmstead Mechanization Workshop, Iowa State agricultural engineer Paul Taiganides said end products from the digester include methane gas, which can be burned in an internal combustion engine for power or heating.

Taiganides described an animal waste digestion plant in San Diego county, California, that is designed to handle wastes from 1,000 confinement hogs per year.

Methane gas from the digester runs a jeep engine, which in turn supplies heat needed to help decompose the manure. The jeep engine also turns a war-surplus generator that provides enough electricity to heat the pig nursery.

Taiganides said several digestion plants are now in operation in Europe. Gas from these plants is used to power farm tractors. The gas is first compressed to 5,000 psi--pounds per square inch--and then placed in two steel cylinders fitted on each tractor. Other European uses for the gas include heating farm buildings, crop drying, refrigeration and production of electricity.

Taiganides said some major limitations of the digestion process are that it needs daily attention and presents an explosion hazard if air mixes with the methane.

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Another limitation is the high cost of the digester and related equipment. A digester that will take care of waste from 100 dairy cows and 1,000 hogs will cost between $9,000 and $15,000.

However, the digester does have some obvious advantages, Taiganides said. They include odor reduction, lower fly and rodent populations, less chance of water pollution and such marketable end products as methane gas and sludge.

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NEWS FROM AGRICULTURE

NIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

To Attend UI Winter Short Course

_______________ of _______________ has registered for the University of Illinois Winter Short Course in Agriculture January 27 to March 6 in Urbana. The annual six-week course is designed to bring young farmers up to date on the latest in farming ideas and methods.

While attending the short course, _______________ will have the opportunity of choosing from 21 courses in the areas of agricultural economics, agricultural engineering, agronomy, animal science, dairy science, horticulture and veterinary medicine.

_______________ will also have a chance to attend University athletic events, dances, concerts and other activities offered to regular students.

Short course supervisor Warren Wessels points out that registration is still open to interested young farmers. He believes that the short course and other events like it play an important role in today's modern agriculture.

"The need for technical and management skills becomes more obvious each year as the number of farms decreases and size of farming operations increases," Wessels explains. "The short course is designed to help give young farmers those skills--to supplement their high school training and on-farm experience."

Other area farmers who may be interested in attending the U. of I. Winter Short Course should contact their county farm adviser or write to Warren Wessels, Short Course Supervisor, 104 Mumford Hall, University of Illinois, Urbana.

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Editor's Note: Attached is a list of early registrants. The students are listed in alphabetical order by home towns.

Registrants

for

U. of I. Short Course in Agriculture - 1964

Home Town	Name
Altona	McGaan, William Forrest
Alvin	Arnholt, Gerald George, Jr.
Arcola	Wesch, John Philip
Baylis	Olson, Rex Edwin
Bethany	McReynolds, Thomas
Bethany	West, Robert Lloyd
Brimfield	Miller, John Richard
Brocton	Waller, Jerome Joseph
Cambridge	Boelens, Francis Raymond
Cambridge	Mariman, Vernon Albert
Carlinville	Lange, William Walter
Carlinville	Schaefer, Ronald William
Champaign	Corum, John Logan
Chapin	Lakamp, James Arthur
Charleston	Wetzel, Norman Dale
Chenoa	Kraus, Roger Gregory
Chrisman	Hoult, Gerald Lee
Clifton	McTaggart, Joseph Edgar
Crete	Most, Robert Ronald
Decatur	Kruse, David Richard
Deer Creek	Heinold, Ronald Earl
DeKalb	Hulmes, Kenneth Everett
DesPlaines	Landmeier, David Franklin
Dixon	Gerdes, Marvin Leroy
Emington	Hanlon, John Thomas
Erie	Dail, Max Thomas
Eureka	Rokey, John Roger
Fairbury	Schieler, Harvey Joe
Fairbury	Walter, Peter Daniel
Farmer City	Dasher, Virgil C., Jr.
Farmer City	Otto, Raymond Edward
Farmersville	Elvidge, Larry Edward
Fenton	Black, Gary Floyd
Fisher	Sampson, Comer Dean
Foosland	Detweiler, Dennis Heiser
Forrest	Skinner, Elvin Lee
Freeburg	Culli, David Earl
Galena	Gratton, Melvin LeRoy
Galesburg	Carlson, Dale Clifford
Galesburg	Hennenfent, Mike Leo
Galva	Olson, Ray Cecil
Geneseo	Hines, Larry Richard
Gibson City	Byerline, Ronald Eugene
Gilman	Nims, Larry George
Greenfield	Thornton, John Williams
Hammond	Schelle, Donald Lee
Haviland, Ohio	Dunham, Charles William, Jr.
Henry	Appel, Donald Joseph
Henry	Rowe, Gary A.
Highland	Barth, James Patrick
Humboldt	Swisher, Charles Thomas
Illinois City	Feldman, Gary Edwin
Jacksonville	Richardson, Steven Don
Kankakee	O'Connor, Patrick Joseph

Home Town	Name
Kingston	Griner, Glenn Alan
Lanark	Huggins, James Eugene
Lexington	Grimes, William John
London Mills	Leverton, Lyle Lynden, Jr.
Louisville	Schoonover, Richard Glenn
Lowpoint	Schertz, Edward Jay
Manlius	Schmidt, Maurice F.
Manlius	Whittaker, Dennis
Maple Park	Caquelin, Louis Curtis
Maple Park	Umbdenstock, Anthony James
Marengo	Schuring, Alan Fredric
Martinsville	Davidson, Jim Daniel
Mattoon	Donnell, Tom Ray
McLeansboro	Organ, Gary Lee
Milford	Carley, Russell David
Monmouth	Willis, Kent Everett
Monticello	Kirkland, Charles Bruce
Morrisonville	Miller, Theodore Robert
Mount Sterling	Glasgow, David Randall
Northbrook	Diederich, Bruce Henry
Olney	Ginder, Frank Raymond
Pawnee	Megginson, Ralph Norman
Pawnee	Schober, Alvin Albert
Paxton	Anderson, Richard Dwayne
Pearl City	Gassman, Roger Lynn
Pekin	Donely, Glen Alvin
Petersburg	Clark, Edward Allen
Piper City	Gerdes, Robert Allen
Polo	Poole, David George
Ramsey	Matzker, Dean Joseph
Rantoul	Orr, Dick Eugene
Rio	Watters, Robert LeRoy
Roanoke	Scherer, Richard Dale
Rochester	Archer, Wayne McMurry
Sadorus	Goodmann, John Hans
Saunemin	Hanley, Dean Edward
Shelbyville	Small, Albert Wayne
Sheldon	Gooding, Edward Lee
Sheldon	Schoolman, John Albers
Shumway	Soltwedel, Delbert Eugene
Sumner	Mushrush, Roger Lee
Thomasboro	Schmidt, Eldred E.
Tiskilwa	Forbeck, Perry Jay
Towanda	Killian, Mark Anthony
Tuscola	Boyer, Fred George
Tuscola	Johns, Lyle Wayne
Tuscola	Ross, Fred Carroll
Valmeyer	Hoffmann, Lyle Henry
Valmeyer	Leber, Gary Lee
Vandalia	Daniels, John Cyril, Jr.
Walnut	Wessel, William Ronald
Waterloo	Wetzel, Walter John, Jr.
Waverly	Brown, Rodney Herman
Weldon	Reeser, Ted Carlyle
Weldon	Seal, Daniel Franklin
Winfield	Beach, Bernard Anthony

UNIVERSITY OF ILLINOIS
AGRICULTURAL CONFERENCES
Urbana, Illinois

COLLEGE OF AGRICULTURE and the
DIVISION OF UNIVERSITY EXTENSION

FOR IMMEDIATE RELEASE

Governor Kerner To Speak At U. Of I. Agricultural Industries Forum

URBANA--Governor Otto J. Kerner will discuss Illinois' potential in export markets on Friday, January 24, at the Sixth University of Illinois Agricultural Industries Forum here.

At the noon luncheon in the Illini Union Ballroom, Governor Kerner will explain some of the possibilities for expanding Illinois trade in Europe. He recently toured Europe with a fact-finding committee.

Harold G. Halcrow, head of the U. of I. Department of Agricultural Economics, reports that the following speakers will also cover various phases of foreign and domestic market development in the general sessions: Harold F. Breimyer, agricultural economist with the U. S. Department of Agriculture and visiting professor at the U. of I. this year; Howard Roach, president, Soybean Council of America, Inc.; and Arno H. Johnson, vice president and senior economist, J. Walter Thompson Co., Chicago.

In addition to the general sessions, special programs are scheduled for those interested in marketing dairy products, eggs, poultry, feed, grain and livestock, and in promoting area resources development programs.

Registration will be at 9 a.m. Thursday, January 23, in the Illini Union Ballroom. The opening session begins at 10 a.m. Thursday. Adjournment is scheduled for 3 p.m. Friday.

J. R. Roush is general chairman of the 1964 forum. The Department of Agricultural Economics in the College of Agriculture plans the forum in cooperation with the Cooperative Extension Service in Agriculture and Home Economics. A group of businessmen from agricultural industries helps to select topics for the forum program.

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FOR RELEASE WEDNESDAY P.M., JANUARY 22, 1964

Special Coverage:
Custom Spray Operators' School

Pesticides Rate Low As Cause Of Fatal Accidents

URBANA--Although chemical pesticides have been blamed as notorious killers, these poisons rank at the bottom of the list as causes of fatal accidents in Illinois, reported O. L. Hogsett, U. of I. extension safety specialist.

Automobiles top the list. More people are killed and injured in automobile accidents than in all others put together.

Falls are the second biggest cause of accidents. Surprisingly, eight out of ten falls occur on flat, level surfaces.

Next comes fire, the greatest potential danger that we have. Yet nine out of ten fires are man-made and can be prevented.

Several smaller but still important causes are drownings and accidents caused by railroads, firearms and, at the bottom of the list, poisons.

Hogsett, speaking Wednesday at the 16th Illinois Custom Spray Operators' Training School at the University of Illinois, pointed out that 88 percent of all accidents are caused by human failure. In automobile accidents, human failure causes 98 percent of the accidents.

To avoid accidents, manage your time so that you can get things done without hurrying. Hurrying often causes carelessness. Most machines run faster than people can think and react. It takes only a fraction of a second to think and react, but in that time you can have an accident.

If you take time to do something the right way, you will be doing it the safe way, Hogsett emphasized.

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FOR RELEASE THURSDAY A.M., JANUARY 23, 1964

Special Coverage:
Custom Spray Operators' School

Soybean Pre-Emergence Use Increases

URBANA--Even with some minor injury and loss of soybean stands from pre-emergence weed control chemicals, farmers will use these chemicals even more widely this year than in past years, predicted University of Illinois agronomist F. W. Slife at the 16th annual Illinois Custom Spray Operators' School here today.

U. of I. research has shown that even a 10 percent loss in stand from pre-emergence treatment will not affect the final yield, Slife reported. In the early stages of growth, soybeans have a tremendous capacity to "bounce back" from herbicide damage. Herbicide treatment doesn't appear to affect soybean yields so much as corn yields, he pointed out.

Here's Slife's evaluation of materials now used on soybeans and a new one--Lorox--that shows promise:

Randox. Farmers are increasing their use of Randox to control weeds--primarily giant foxtail--in soybeans. Randox is usually not suggested on soils that have a low clay and organic matter content, such as southern Illinois soils. Many such soils are heavily infested with giant foxtail.

U. of I. studies show that if the first crop of foxtail is controlled for two or three weeks, soybeans will shade the row area enough to curtail foxtail germination after that time. This may allow enough time to make Randox a practical treatment in soybean fields.

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Randox is approved for broadcast use at the rate of 5 pounds per acre this year. This increased rate may increase the residue enough to make it acceptable on the lighter soil types. But to control serious foxtail infestation on lighter soils, it's still well to compare Randox with other materials.

Amiben. This chemical gave generally excellent control in areas that received rainfall within 10 days to two weeks after planting. Amiben apparently controls annual grasses slightly better than the annual broadleaved weeds. Annual morning glory is the only annual broadleaf that resists Amiben. Last year some soybean stunting occurred when rain fell within a few days after treatment. Some stand loss was also reported.

Amiben still gives excellent control of annual grasses and most broadleaf weeds in soybeans, but it doesn't have the selectivity that Randox has.

Alanap. This chemical still does an acceptable weed control job in soybeans, even though it occasionally injures the plants. It controls annual grasses quite well and most of the broadleaves with the exception of smartweed.

Lorox. Researchers have tested this relatively new chemical for several years. Rates appear to vary considerably with soil types. Heavier rates are required on heavier soil types. Lorox seems to control annual grasses and most broadleaved weeds.

For the upcoming crop year, Slife suggests using Lorox on a trial basis, especially on the lighter soil types of southern Illinois, at the rate of one pound of active ingredient broadcast per acre. This rate should provide reasonably good selectivity on soybeans, but the leeway between good weed control and injury to beans is small. Slife does not recommend this material for use on heavy soils in central and northern Illinois. In these areas farmers would have to apply as much as three pounds per acre broadcast. Soybeans would be much less tolerant to this heavier rate. But future research may indicate that Lorox has a place on soybeans in the northern two-thirds of the state, Slife commented.

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FOR RELEASE THURSDAY A.M., JANUARY 23, 1964

Special Coverage:
Custom Spray Operators' School

"Go Easy" On Directed Sprays

URBANA--Until the situation changes, don't rely on directed post-emergence sprays for your total weed control program, University of Illinois weed control specialist Ellery Knake advised spray applicators, chemical company representatives and farmers attending the 16th annual Illinois Custom Spray Operators' School here today.

It's not wise to rely on directed sprays alone, since weather may prevent timely application. If a pre-emergence herbicide is not effective, you have a "second chance" with other methods. But if post-emergence chemicals are not effective on grass, there may be no second chance, Knake pointed out.

If a pre-emergence herbicide, early rotary hoeing or row cultivation gives satisfactory control, there will be little need for a directed spray, he added.

Some farmers may wish to be ready to use a directed spray if pre-emergence herbicides fail or if rain prevents timely cultivation. But such control should be only an added tool and not a replacement for pre-emergence application and cultivation. Primarily it would help with the increasing problem of controlling annual grasses directly in the crop row. To control broad-leaved weeds, 2,4-D is still more economical and practical, Knake advises.

Some farmers will be interested in trying present post-emergence materials and methods, but post-emergence spraying of annual grass weeds will not "come of age" until more selective herbicides are developed, Knake predicted.

In addition to 2,4-D, agronomists have used dinitro, herbicidal oils, nitrogen solutions, dalapon, flame cultivation and linuron--Lorox--as post-emergence controls. Except for 2,4-D, the major problem with most of these materials is crop tolerance. Although suitable equipment for directing applications offers a way to reduce the amount of chemical that contacts the crop plants, true crop tolerance would be highly desirable. It would also offer many advantages over dependence on physical placement to avoid crop injury, concluded Knake.

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FOR RELEASE WEDNESDAY A.M., JANUARY 22, 1964

Special Coverage:
Custom Spray Operators' School

Atrazine Granules Discontinued

URBANA--Although many farmers prefer granules, this form of atrazine has not controlled weeds quite so well as the 80 percent wettable powder applied as a spray. The use of granules has also caused more residue problems. So this year only the wettable powder form of atrazine will be available for weed control in corn, University of Illinois weed control specialist Ellery Knake reported to farmers, custom spray applicators and chemical company representatives attending the 16th annual Illinois Custom Spray Operators' School here today.

Farmers may expect better weed control from the wettable powder formulation, said Knake. But the possibility of damage to such crops as oats and soybeans the year following application still remains, he cautioned. Agronomists still suggest planting corn the next year wherever atrazine is used, with no additional chemical before such crops as soybeans and small grain are planted. This practice is particularly important if atrazine granules were used last year.

Good agitation and accurate application of the correct rate are extremely important if farmers are to avoid residue problems with atrazine.

Atrazine can give good control of both grasses and broad-leaved weeds when used correctly, Knake said. Randox can control annual grasses for several weeks. The combined use of Randox pre-emergence and an early post-emergence application of 2,4-D can provide effective and economical control of both grasses and broad-leaved weeds, he advised.

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Randox has been more effective on the darker soils of northern Illinois than on the lighter soils of the southern part of the state. Since this chemical is relatively soluble and subject to leaching, it should not be used on sandy soils, Knake said. The granular form has performed at least as well as the liquid and is usually preferred to the liquid form, since granules help to reduce irritation, he pointed out.

Randox-T can control annual grasses and some broad-leaved weeds for several weeks. Corn does not tolerate Randox-T quite so well as Randox, but this problem has not been serious where the recommended rate is used. Like Randox, the granular form of Randox-T is preferred because it causes less irritation than the liquid form.

2,4-D ester is available for pre-emergence use on corn in both granular and liquid forms. Although the cost is low, the results are sometimes disappointing, Knake advised. To control grass weeds with 2,4-D, rain is needed within a few days after application so that the 2,4-D will leach into the soil and come into contact with the very young seedlings soon after germination. This timing is less critical with some of the other herbicides.

Farmers are becoming increasingly aware of the shortcomings of present pre-emergence herbicides. But they also realize the tremendous benefit they derive from using such herbicides where serious weed problems exist. The use of these chemicals as an efficient means of controlling weeds will continue to increase this year as it has for the past several years. Last year about one-fifth of the corn and soybean acreage in the state was treated with pre-emergence herbicides, Knake concluded.

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FOR RELEASE WEDNESDAY P.M., JANUARY 22, 1964

Special Coverage:
Custom Spray Operators' School

New Herbicides Discussed

URBANA--Several new herbicides or new combinations of herbicides that became available during 1963 may have a place in a chemical weed control program, University of Illinois agronomist F. W. Slife told farmers, custom spray applicators and chemical company representatives attending the 16th annual Custom Spray Operators' School here today.

Here's his evaluation of the new chemicals:

Eptam-2,4-D. This combination of older chemicals has given rather consistent control of annual grasses and broadleaf weeds in corn when applied as a pre-emergence treatment. Apply at the rate of 2 pounds of Eptam and 1 pound of 2,4-D. On heavier soils it appears to have about the same residue length as Randox. When applied accurately, it has not injured corn. But use of a higher rate or application on light soils could cause injury.

Bannel D. This compound is similar to 2,4-D in that it controls broadleaf weeds and generally does not affect grasses. It is especially good on members of the smartweed family but is similar to 2,4-D on other common broadleaf weeds. It is finding some use on turf to control knotweed, chickweed and other species not well controlled by 2,4-D.

Bannel D may have a place in controlling broadleaf weeds in corn. Soybeans are extremely sensitive either to the drift or to soil residues. But soil residues are not likely to be a serious problem in corn, since the treatment rate is very low.

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Trifluralin. When this compound first appeared on the market, it was used primarily to control crabgrass. It is now being used on certain flowers and shrubs. In addition, it appears promising for controlling grasses and broadleaf weeds in soybeans. It is most effective when incorporated in the soil, but it must be worked into the upper surface to avoid soybean injury. Used in this manner, the chemical can control seedling Johnsongrass and wild cane. Its further use in soybeans may depend upon finding a method of incorporation that is more reliable than the rotary hoe or harrow.

Tordon. This compound was new to most research men just last year. It controls broadleaf weeds but has little effect on grasses. Its greatest use may be to control brush and perennial broadleaf weeds. As little as 2 ounces per acre will control broadleaf weeds. It has a potential use in corn, but soybeans are extremely sensitive to it. Rates above the recommended rate would probably cause a soil residue problem for soybeans planted a year later.

R1607. A carbamate herbicide similar to Eptam, this material will be marketed this year in the Johnsongrass area to control seedlings and wild cane in soybeans. For most effective use, work it into the upper surface immediately after application. It should control annual grasses well and do a fair job on broadleafs. As is true of Eptam, soybeans are not completely tolerant to R1607. Some stunting or loss of stand will occasionally occur.

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FOR RELEASE WEDNESDAY A.M., JANUARY 22, 1964

Special Coverage:
Custom Spray Operators' School

Granular Atrazine May Whip Residue Problem

URBANA--Much of the residue problem resulting from atrazine will be corrected this year with the elimination of the granular form, predicted University of Illinois agronomist F. W. Slife at the 16th annual Custom Spray Operators' School here today.

Failure to distribute atrazine properly in the granular form has caused more complaints with this formulation than with the wettable powder. Changing to wettable powder will not eliminate the problem entirely. The heavy soil areas, which have a relatively high organic matter content, will probably continue to have residue problems with atrazine, but they will vary from year to year with the environment, Slife predicted.

Randox-T caused some residue problems several years ago, but it appears to create a relatively minor problem for most Illinois farmers now. If it is used properly, agronomists see no problem for the farmer who grows small grains and soybeans after the treated corn, Slife advised.

Two apparently long-lasting herbicides, Bannel-D and Tordon, are appearing on the market. But neither one is in general use yet. Agronomists expect more information to be available before they recommend either chemical for crop use.

Since the Food and Drug Administration now requires more information from the manufacturer before a compound is cleared, it is doubtful that any extremely dangerous chemical--from the standpoint of soil residues--will appear on the market in the future. But it is still important for the farmer and other herbicide users to read the label carefully or consult an authority on agricultural chemicals about possible residue problems, Slife pointed out.

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NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE THURSDAY P.M., JANUARY 23, 1964

Combine Pre-Emergence Weed Chemicals, Minimum-Tillage In U. Of I. Tests

URBANA--Pre-emergence weed control chemicals eliminated the need for cultivation without affecting corn yields on most fields studied in recent University of Illinois trials.

However, the tests, held on a private farm in Ford county, also showed that one cultivation would probably be desirable to level out the rough fields for harvesting, according to U. of I. agricultural engineer Wendell Bowers.

Speaking today before the annual U. of I. Custom Spray Operators School, Bowers said that plow-planted corn fields treated with pre-emergence atrazine yielded essentially the same as check fields that were cultivated once and then broadcast-sprayed with 2,4-D.

As expected, results with pre-emergence Randox-T were not so effective, since it is not intended to give full-season weed control. However, Randox-T-treated plots that were cultivated once yielded about the same as check strips and plots treated with the atrazine.

Harvesting was a problem in all of the plow-plant plots because the ground was so rough, Bowers said. Time and cost involved in harvesting the rough fields indicated a need for at least one cultivation.

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1/21/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Rural Youth Rally Set For January 31 To February 2 On UI Campus

URBANA--About 125 Illinois Rural Youth are expected to attend the annual Rural Youth Winter Rally at the University of Illinois January 31 to February 2.

Rural Youth is an organization for "older" young people ranging from 18 to 30 years in age. Most members either are or have been active in 4-H. The organization is dedicated to leadership development, education and community service.

Marian Jackson of the U. of I. state 4-H staff says that the key speakers at the general session on February 1 will be Harvey Schweitzer and Karl Munson, agricultural economics extension specialists at the University of Illinois. Schweitzer will speak on "You and Your Community." Munson's topic is "Leisure-Time Opportunities."

The banquet speaker will be Emil "Farmer" Bill, Farm Director, WMBD, Peoria.

During the rally, new state officers will be elected.

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Note to Editors: For information about who may be attending the rally from your area, please contact the county farm or home adviser.

FOR RELEASE WEDNESDAY P.M., JANUARY 22, 1963

Special Coverage:
Custom Spray Operators School

Aspirin Caused More Accidental Deaths Than Pesticides, Entomologist Says

URBANA--Aspirin caused 36 deaths in Illinois from 1960 to 1962. During the same three years, pesticides caused 10 deaths, according to U. of I. extension entomologist H. B. Petty, Illinois Natural History Survey.

Nine of the ten deaths were home accidents. One was an agricultural accident. Four victims were children under three years of age, and one was under 12 years.

Petty reported that over the three-year period three deaths were caused by rodenticide poisoning from a phosphorus bait; one death was due to sodium arsenite; six were due to sodium fluoride, one to parathion, one to lead arsenate, one to PDB--paradichlorobenzene--and one to an unknown cause probably a chlorinated hydrocarbon. Eight of the ten deaths involved pesticides of pre-1945 vintage.

Speaking today at the Illinois Custom Spray Operators Training School at the University of Illinois, Petty pointed out that more accidents due to pesticides occur in controlling household pests than in controlling lawn and garden pests. Mothballs and baits caused 72 percent of the indoor non-fatal pesticide accidents involving children.

Petty said that almost two-thirds of the children involved in non-fatal pesticide accidents got the material while it was in use. Bait pesticides are especially dangerous to children. Don't use baits if other control methods are possible, Petty cautioned. When children are present, he recommends putting the bait out at night in out-of-the-way places and picking it up early in the morning.

Even though acute poisoning is extremely small, one accident is one too many, Petty said. Read the label each time you use a pesticide, he warned.

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FOR RELEASE WEDNESDAY A.M., JANUARY 22, 1964

Special Coverage:
Custom Spray Operators School

Researchers Wage Two-Front War On Corn Stunt

URBANA--Research workers in Ohio and Mississippi--where corn stunt, a virus disease, has played havoc for two years--are intensifying their efforts to locate the insect carrier of corn stunt and are making extensive plantings in a search for stunt resistance, University of Illinois plant pathologist A. L. Hooker reported here today.

Hooker, speaking at the 16th annual Custom Spray Operators School, said that corn stunt has not been found in Illinois. But neighboring Indiana and Kentucky have reported this havoc-raising disease.

Last year severe corn stunt damage occurred in Yazoo county, Mississippi, where the disease completely destroyed 5,000 acres of grain and another 10,000 acres showed losses of 10 to 50 percent. The disease was found in 12 Ohio counties. Some 7,000 acres along river bottoms in Scioto county were infected.

Under field conditions, symptoms of the disease show up first on plants 18 inches high or more. First, faint light-colored striping occurs on the upper leaves, accompanied by a shortening of the upper internodes and bunching of the plant's top. Later the leaves show a reddish-purple streaking, and the plants are definitely stunted. Severely affected plants are barren; others may show only poor ear development. Excessive root production, including brace roots and secondary rootlets at the ends of brace roots, often shows up. Damage is most severe when young plants are infected.

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Two leafhoppers are known transmitters of the disease in more tropical regions, but researchers have found neither in Ohio or Mississippi.

The corn stunt virus has a long incubation period in the insect carrier and in the corn plant, said Hooker. The leafhopper cannot transmit the virus for the first 14 days after feeding on a diseased plant, but it retains and transmits the virus for as long as 88 days after feeding, he added. Symptoms show up in the corn plant from 26 to 72 days after infection following leafhopper feeding. The virus is not seed borne, Hooker advised.

Two strains of the virus are known. Both the "Rio Grande" and the "Mesa Central" occur in Mexico. None of the corn-belt hybrids or inbreds tested in Mexico have shown resistance, Hooker reported.

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FOR RELEASE WEDNESDAY A.M., JANUARY 22, 1964

Special Coverage:
Custom Spray Operators School

Corn Stalk Rot Or Rootworms? Both "Equal" Down Corn

URBANA--Either stalk rot or rootworms mean hard-to-harvest corn or corn left in the field. A recent two-year U. of I. study estimated statewide stalk rot losses at 8.6 percent for this period. Direct yield losses were valued at over $70.5 million, University of Illinois plant pathologist M. C. Shurtleff reported to the 16th annual Custom Spray Operators School here today.

The time that the damage appears usually pinpoints the blame on stalk rot or rootworms. Rootworm damage usually shows up before or about the time the corn plant tassels. Tunneling or eating away of the roots usually points to rootworm. If damage occurs on land that has been in corn for two or more years, the chances are that the northern rootworm is the culprit. Damage in first-year corn usually means that the southern rootworm has attacked it. Stalk rot tends to appear as the corn plant reaches maturity.

Soil insecticides will control either of these rootworms. No single practice or hybrid completely controls stalk rot disease. But Illinois farmers can reduce stalk rot damage by following these practices:

Grow adapted, full-season, resistant hybrids. Early-season varieties tend to be most susceptible to stalk rot.

Practice balanced soil fertility based on competent soil test findings. Excessively low potash or high nitrogen is most commonly associated with stalk rots.

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An average of 16,000 to 18,000 plants per acre at harvest time, planted on fields with high yield potential, is usually a good compromise for getting top yields and still preventing excessive lodging.

Harvest as early as practical after the corn has matured to the desired stage. Stalk rot is progressive and continues until picking.

Control rootworms, other soil insects and corn borers by applying recommended insecticides. Stalk- and root-rotting fungi may enter plants through insect feeding wounds.

Avoid deep or close cultivating and wounding stalks. Stalk- and root-rotting organisms may enter such wounds.

When applying sprinkler irrigation, water on a rising temperature so that plants will dry off before late afternoon. Timely irrigation will reduce charcoal stalk rot losses.

Seed treatment, clean plowing and crop rotation are not effective in controlling stalk rot in Illinois.

Detailed descriptions of the economically important stalk rots are available in the office of the county farm adviser, Shurtleff advised.

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UNIVERSITY OF ILLINOIS
AGRICULTURAL CONFERENCES
Urbana, Illinois

COLLEGE OF AGRICULTURE and the
DIVISION OF UNIVERSITY EXTENSION

FOR RELEASE FRIDAY A.M., JANUARY 24, 1964

Economist Warns: Prepare For Tidal Wave of 18-Year-Olds

URBANA--A tidal wave of 18-year-olds will hit this country in 1965. Unless we are ready to train and educate them, they could cause a disastrous rise in unemployment, warned Arthur Mauch, professor of agricultural economics at Michigan State University.

He emphasized the need to step up formal schooling, vocational training and retraining for the 26 million young workers who will be joining the working force during the 1960s. These people are the country's greatest underdeveloped resources.

Speaking at the U. of I. Agricultural Industries Forum Friday morning, Mauch said these youngsters are crowding the high schools today and will overcrowd the colleges tomorrow. Even if we begin immediately to build facilities and train teachers, the effort is likely to be inadequate.

Mauch pointed out that by 1970 the country would need 40 percent more white-collar or professional and technical workers; 25 percent more self-employed proprietors, sales clerks and blue-collar workers; 25 percent more workers in service occupations, such as filling station attendants and store clerks; and 18 percent more semi-skilled workers.

No more unskilled workers will be needed in 1970 than in 1960, Mauch said. Agriculture will be needing fewer workers, but those that are needed will have to be skilled. No longer can farming be the dumping ground for the uneducated and unskilled, he declared.

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Mauch pointed out that investment in education returns about 17 percent. For each dollar spent on education, 17 cents will be returned. This return is far greater than that on most capital investments.

In addition to added future earnings and ease of getting a job, Mauch listed these assets of education to our nation: educated mothers, educated neighbors, improved race relations, reduction of poverty and crime and the satisfaction of being literate and developing one's talents.

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FOR RELEASE THURSDAY A.M., JANUARY 23, 1964

Special Coverage:
Custom Spray Operators School

Insect Situation Good: Petty

URBANA--On the basis of last year's activity, the 1964 insect situation is generally good. But some problem areas will require about the same control efforts as in the past two years, reported H. B. Petty, entomologist with the University of Illinois and Natural History Survey.

Petty gave the following "bug-by-bug" outlook at the 16th annual Custom Spray Operators School here today:

Grasshopper. Last year grasshopper populations were heavier in northwestern and northern Illinois than in other sections. A survey of 1963 adult populations indicates that only northwestern Illinois will pose any potential problem. This area takes in the major parts or all of Jo Daviess, Stephenson, Winnebago, Boone, McHenry, Kane, DeKalb, Ogle, Carroll, Lee, LaSalle and Kendall counties. Parts of bordering counties are also affected.

Blister beetle. In the larval stage blister beetles feed on grasshopper egg pods. So when 'hopper numbers are high, blister beetle populations increase.

Soil insects. Resistance to aldrin and heptachlor may require a change to different insecticides in a few more years, but not this year. At the rate of spread, the western corn rootworm at some future date may become an Illinois problem. So far it is not present in the state.

European corn borer. Some fields of early corn were damaged noticeably in western and northwestern Illinois last year. This year's

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outlook shows a triangular area from Rockford to Joliet to Pike county as having a potential of light to severe damage this summer. The remainder of the state has a potential of non-economic to light damage.

Chinch bug. These pests increased in number last year, and the threatening area is expanded for this year. Dry weather in the spring and early summer would make a chinch bug outbreak possible.

Spittlebug. Populations are still comparatively low. Only two areas present a moderate potential--one area including Jo Daviess, Stephenson, Winnebago, Carroll and Ogle counties and the other taking in most of Iroquois county and the extreme northern part of Vermilion county.

Hessian fly. Populations of this wheat pest were low in 1963. Because of dry weather, wheat germinated late. The effect was the same as observing the "fly-free date" and probably reduced fly populations further.

Armyworm. These worms were present this past summer and were severe in wheat in some areas. Some "armyworm" damage might actually be rabbit damage.

Greenbug. These insects were found in small grains last year but did not develop.

Spotted alfalfa aphid. These aphids were found last May but did not develop until late last fall in southern Illinois.

Southwestern corn borer. This pest was found for the first time in Illinois last year.

Cereal leaf beetle. So far none have been found in the state.

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1/21/64

FOR RELEASE WEDNESDAY P.M., JANUARY 22, 1964

Special Coverage:
Custom Spray Operators School

Japanese Beetle Won't Disappear

URBANA--Despite efforts to eliminate the Japanese beetle since 1930, there is no reason to expect it to disappear suddenly, according to entomologist W. H. Luckmann of the Illinois Natural History Survey.

Speaking at the 16th annual Illinois Spray Operators School here today, Luckmann predicted that unless there is a break-through in eradication techniques, this beetle will become familiar to farmers and homeowners and will probably become a destructive pest in Illinois. It attacks some 276 plants but tends to concentrate on corn, soybeans, fruit crops and lawns.

Luckmann gave these reasons for a continued threat from the Japanese beetle:

1. Infestations in Indiana provide a ready source of beetles to invade Illinois. Although Indiana and a portion of Iroquois county, Illinois, are quarantined, it's futile to expect complete confinement of the beetle now or in the future.

2. The beetle is sensitive to moisture. Limited rainfall may retard its spread in some areas. But in Illinois, adult females regularly lay eggs at the base of corn and soybean plants, where dew dripping from the plants provides a favorable location for egg-laying, especially during periods of dry weather. Vast Illinois corn and soybean fields provide a suitable--and perhaps ideal--environment for the beetle.

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3. The adult beetle feeds on the foliage of many plants, such as weeds, flowers, shade trees, deciduous fruits, vegetables, corn and soybeans. But it lays its eggs in the soil. Farmers can control the adult and the grub with insecticides. The continued widespread use of soil insecticides and foliage sprays on orchard, vegetable and ornamental crops should retard build-up of the beetle.

The State Department of Agriculture and the USDA Plant Pest Control Division each year trap portions of Illinois to find new infestations and suppress them with soil treatments of insecticides. Because of suppression treatments by these agencies, the beetle has been eliminated in some areas and suppressed to non-economic numbers in others. If continued, these programs will greatly retard the beetle. But in portions of Newton county, Indiana, where no one has employed intensive suppression programs, the Japanese beetle has become a destructive pest of corn and soybeans in less than 10 years.

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UNIVERSITY OF ILLINOIS
AGRICULTURAL CONFERENCES
Urbana, Illinois

COLLEGE OF AGRICULTURE and the
DIVISION OF UNIVERSITY EXTENSION

FOR RELEASE THURSDAY A.M., JANUARY 23, 1964

Market For Farm Products Expanding, Changing

URBANA--Demand for farm products is likely to continue growing both at home and abroad. But growth trends will be somewhat mixed and will not come easy, either here or overseas.

Harold F. Breimyer, U. S. Department of Agriculture economist and visiting professor at the University of Illinois this year, today told the Agricultural Industries Forum that quality of agricultural products would be of increasing concern to both foreign and domestic buyers.

Breimyer pointed out that all farm products won't share equally in the expanding market. As consumer income goes up, people buy more high-value food, such as beef. On the other hand, in consumer buying, dairy products have run into competition from lower value products.

Weight and health consciousness has hurt the market for some foods. Excess fats will remain a taboo. Sensing a possible end to the tobacco business heyday, Breimyer asked, "Will rational men yield to medical warnings or to the habit-forming quality of tobacco?"

Europe may buy somewhat more livestock products than in past years. However, a better bet is that she will buy more feedstuffs for producing them, mainly corn, grain sorghums and soybean meal.

However, prospects are poorer for the soybean oil market. Breimyer says we need to develop a soybean with higher meal and lower oil content.

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Wheat will not find a ready market in Europe. Higher income has changed the eating habits of Europeans. Like Americans, they are eating less cereal foods. Europe is producing more wheat than ever before and may soon have wheat to export.

Low-income countries of the world need foodstuffs but lack dollars. Almost a third of our farm exports are now sold to them for their local currencies. Nearly three-fourths of U. S. wheat exports are paid for by local currencies.

Consequently, the future size of foreign markets for several farm products will depend on continued U. S. government financing of sales for local currency under Public Law 480 and similar legislation.

Although sales of large quantities of wheat to iron curtain countries now seem possible, Breimyer warned that this may not be a long-term trend.

Breimyer forecast that more world trade would be influenced by political negotiation. Much will be managed within regional compacts and trading unions. Attractive markets will still exist in foreign lands. Sellers will have to go after them.

At home, consumers will demand safely grown, carefully inspected, wholesome foods. But Breimyer pointed out that most government marketing services are aimed at making today's complicated marketing system work better.

He traced the trend in marketing in the United States--from centralized markets spurred by railroads, followed by more recent decentralized markets and direct trading. Marketing now appears to be shifting to a third form--contractual marketing, which is usually called vertical integration.

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One reason for contractual marketing, Breimyer recognized, is to obtain farm products of more reliable quality and in more dependable supply. He noted that this trend points up one of the weaknesses of the marketing system.

Breimyer emphasized that the marketing industry has become a productive giant because so many more services are now performed on farm products. Products are processed, packaged, pre-cooked and distributed widely, and may be stored from season to season.

The marketing system still performs the older functions. It exchanges ownership, provides the price-making and the production-guiding functions. But the gap between the farmer and the consumer is wider than ever, Breimyer said.

He asserted that the marketing system is becoming an ever more important part of the process for meeting the food and clothing needs of our population.

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UNIVERSITY OF ILLINOIS
AGRICULTURAL CONFERENCES
Urbana, Illinois

COLLEGE OF AGRICULTURE and the
DIVISION OF UNIVERSITY EXTENSION

FOR RELEASE FRIDAY A.M., JANUARY 24, 1964

Economist Sees 60 Percent Rise In Food Sales

URBANA--If consumers spend as much of their income for food in 1974 as they did in 1963, food sales will go up by 60 percent in the next ten years, Arno H. Johnson, vice president and chief economist of J. Walter Thompson, predicted today.

Speaking at the University of Illinois Agricultural Forum Friday morning, Johnson said that population growth alone would cause a 22 percent increase in food and household product needs.

The remainder of the potential boom in the food market by 1974 will come from changes in food habits. He explained the changes in this way:

Upgrading the diet--Average family income will increase from $8,300 in 1963 to about $10,700 in 1974. As income goes up, people eat more and better foods.

Changing age make-up of the population--The biggest population increase will be in the young, productive family and 10- to 19-year-old groups. People in these age groups eat more food. They will make u 58 percent of the total population.

Increased urban living--People will continue moving from rural areas to the suburbs. As their income goes up, they will buy more, better and different foods.

Changing living standards--Living standards for most of the population will improve. As living standards rise, a great potential market will develop for food and other personal consumption products.

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Even though food needs will increase, Johnson emphasized that the greatest potential food market cannot be developed without creating an interest and a desire for higher quality food and more services.

Johnson cautioned agriculture to be alert to changing food needs. Demand for some products, such as wheat flour and white bread, will decrease, but that for specialty wheat breads and pastries will increase.

People will eat more high-quality foods, such as beef. Johnson pointed out that farmers may need to grow more feed and forage crops to produce more animals for food.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Scientist Reports Use Of Swine In Heart Research

URBANA--Heavy refeeding after long periods of starvation caused permanent damage to the heart and blood vessel tissue of swine in a recent University of Illinois study.

The study was made to investigate reports of similar damage to the cardiovascular systems of humans subjected to starvation or prolonged semi-starvation.

Reporting the research this week at the annual Illinois Nutrition Conference, U. of I. animal biochemist B. C. Johnson said the results might indicate possible effects of the currently popular weight reduction method that calls for repeated fasts.

Johnson said the hogs received no feed for periods ranging from 30 to 40 days during various phases of the study. After some of these periods, they were fed a natural corn and soybean meal diet. At other times this diet was modified.

Modified diets containing glucose were the most harmful to the animals, Johnson said. However, heavy refeeding after at least two starvation periods caused apparently irreversible damage in the myocardium, arteries and arterioles. Researchers were not able to determine the effect of just one starvation-refeeding cycle on the hogs.

The U. of I. scientist said pigs were used for the study because they are one of the few animals that, like man, will eat great quantities of food after extended periods of starvation. Also, swine are highly susceptible to heart failure and they show a high incidence of atherosclerosis.

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FOR IMMEDIATE RELEASE

Calves Weaned At 28 Days Gain Well In U. Of I. Tests

URBANA--Dairy calves weaned at 28 to 35 days gained as well as calves weaned at 56 days during a recent University of Illinois study. And they did it at a feed cost saving of $4.75 per calf.

U. of I. dairy scientist K. E. Harshbarger told about the early-weaning study this week at the annual Illinois Nutrition Conference.

Harshbarger said the study involved 30 Holstein calves. Eighteen of the calves were weaned at 28 days after consuming about 220 pounds of whole milk. The remaining 12 were weaned at 56 days after consuming nearly 360 pounds of milk.

The only difference between the two groups at the end of the test was the higher feed costs for the calves weaned at 56 days. The research showed no significant differences in total gain, heart girth size, height at wither or feed intake, Harshbarger said.

In other tests, U. of I. researchers found that adding molasses dextrose or sucrose to calf starters at the rate of eight percent increased feed intake and boosted gains. Dried whey or alfalfa meal did not improve starter consumption.

Harshbarger pointed out that even though most calves can be weaned at four weeks of age, it's best to feed a small amount of milk during the fifth week to help them make a smooth transition from milk to dry feeds.

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FOR RELEASE THURSDAY P.M., JANUARY 30, 1964

New Harvesting Methods May Require Lease Adjustments

URBANA--Dividing the costs of field-shelling and drying corn in the same ratio as the tenant and the landlord share the crop may work in some cases. However, such division of costs is not flexible enough for most leases, according to V. W. Davis, USDA agricultural economist at the University of Illinois.

Speaking this afternoon to the Illinois Society of Professional Farm Managers and Rural Appraisers on the U. of I. campus Davis said that changes in corn harvesting methods might call for changes in the lease.

Davis recognized that some tenants and landlords might not wish to completely re-evaluate their farm leases. In such cases he suggested that tenants and landlords work out a cost-sharing arrangement based on the conventional ear corn system they have been using.

Under the usual 50-50 crop-share lease, the tenant owns the harvesting and handling equipment. He pays for the fuel and furnishes labor for harvesting and storing the crop. The landlord furnishes storage and pays his share of shelling and marketing costs.

Under this arrangement, Davis reported that each party's share of the harvesting costs would depend on the volume of corn handled. As the volume of corn goes up, the tenant's share of costs decreases and the landlord's share of costs increases. For example, when the tenant handles 4,000 bushels, he pays about 70 percent of the costs under a 50-50 crop-share lease. At 22,000 bushels, the tenant and the landlord share the costs about equally.

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In re-evaluating their lease, the tenant and landlord might decide not to share costs in the same ratio as they share the crop, Davis said. He recommended this flexible method of figuring the proportionate costs:

1. Itemize the investment or value of equipment and facilities furnished by each party. Estimate the annual fixed costs for each.

2. Use the tenant's actual operating costs for labor, fuel, repairs, etc., needed for field-shelling, hauling and drying. Or use standard rates.

3. Divide the cost of fuel and electricity used in drying equally between the two parties.

4. Total the contribution of each party.

5. Determine the proportion of costs each party will contribute. The basis may be the same as that on which each shares the crop, such as 60-40, 55-45, etc.; or it may be determined by the conventional ear-corn harvesting and crib-storage system they are using.

6. Calculate the adjusted payment. Multiply the percent of each party's share by the total costs--tenant costs plus landlord costs. This gives each party's cost, based on the accepted ratio. Subtract this cost from the actual cost paid by each party. Subtract the negative figure and add the positive figure to the actual costs paid by each party according to the accepted share. This figure will be the amount required to balance the costs in the same ratio as determined in step 5 above.

7. Review the lease at the end of the second year of field-shelling to correct any errors in the original estimates. The first year of field-shelling and drying is generally one of adjustment. Changing costs and varying weather at harvest time may change the share of costs from year to year.

Cost sharing, Davis added, is usually a matter of bargaining and agreement between tenant and landlord.

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FOR RELEASE TUESDAY P.M., JANUARY 28, 1964

Most Rural Youth Are Not Prepared For Jobs

URBANA--Most Illinois high school juniors and seniors in rural communities do not plan to go to college. What is more important, those who are not planning for college do not feel ready for jobs, reports D. E. Lindstrom, rural sociologist at the University of Illinois.

Speaking today at the Rural Pastors and Lay Leaders Short Course on the U. of I. campus, Lindstrom said that six out of ten high school junior and seniors do not have plans for college. Of those not planning to go to college, about 90 percent of the boys and 80 percent of the girls do not think they are ready for jobs.

Reporting on a continuing study of educational and vocational needs of rural youth, Lindstrom emphasized the need for some form of educational and vocational program for youth who drop out of school or do not plan to attend college. Some kind of training must be provided to help fit rural youth for the new kinds of jobs requiring competent trained workers, he said.

Cultural training is needed in addition to vocational training. Youth must learn how to work with people, Lindstrom emphasized. In general, rural young people do not know where to go to get such training.

Adequate counseling needs to be provided, Lindstrom said. Some rural high schools have no counseling, while others have only part time. Fewer than one-third of the rural young people therefore have the opportunity for counseling in high school. Fewer than half go to their parents for advice.

Lindstrom listed the church and community as important sources of guidance. Rural youth not planning to go to college need an opportunity to seek competent guidance if they are to know how to choose and prepare for a satisfactory lifework.

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NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Twenty Organizations Donate State 4-H Club Awards

URBANA--Throughout 1964, Illinois 4-H Club members in every county stand to benefit from the nearly 2,000 recognition awards presented only to members in Illinois. The donors include 20 non-4-H-Club-affiliated organizations, reports R. O. Lyon, state 4-H leader, University of Illinois Cooperative Extension Service.

According to Lyon, some of these awards go to members at both county and state levels. The rest are offered at only one of these levels. All are administered by the Illinois state 4-H staff and supplement the national awards available to Illinois 4-H members through the National 4-H Service Committee, Inc.

Here is a list of the awards offered only to Illinois club members:

ILLINOIS 4-H KEY CLUB. The Cities Service Oil Company, New York, awards 14-K gold and enamel keys to boys and girls throughout the state in recognition of superior 4-H Club work over a period of years. In 1963, 278 members in 84 counties received this award.

SCHOLARSHIPS. Robertson's Farm Supply, East St. Louis, offers a $300 college scholarship to a boy or girl enrolled in agriculture, home economics or veterinary medicine. The J. R. Watkins Company, Winona, Minnesota, another scholarship donor, offers two $150 awards.

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LEADERSHIP. The Republic Steel Corporation, Cleveland, donates six state cash awards.

CLUB OF THE YEAR. The Illinois Agricultural Association, Bloomington, offers an award to an outstanding club in each county. This award is designed to encourage better local club programs.

CORN--X-TRA YIELD. F. S. Services, Inc., Bloomington, awards five $150 scholarships, one in each extension district in the state, to outstanding members entered in the X-tra Yield Corn-Growing Contest. This organization also offers a trophy for the entry with the highest yield in the state. The highest scoring member in each of the five extension districts receives a wrist watch.

DAIRY. Seven organizations offer a number of awards for achievement in various dairy projects.

The National Dairy Products Corporation makes awards through its member companies in Illinois: Kraft Food Co., Sugar Creek Creamery, J. R. Roszell Co., St. Louis Dairy Co. and Sealtest Foods.

The Illinois Ayrshire Association, Wyanet, provides certificates for members with Ayrshire projects. This association also makes three state awards.

The Illinois Brown Swiss Association, Greenview, provides a certificate of merit to the highest ranking member in each county with the Brown Swiss project. They also offer three state awards.

The Illinois Guernsey Breeders Association, Batavia, offers a medal to the highest ranking member in each county in the Guernsey project.

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The Illinois Jersey Cattle Club, Lovington, gives a certificate of merit to the highest ranking member in each county. This organization also provides a trophy for the highest ranking member in the state.

The Illinois Holstein-Friesian Association, Woodstock, offers certificates of merit to a group in each county with superior projects. Besides a group of state awards, the organization finances three trips to the 4-H Dairy Conference in Chicago.

The Pure Milk Association, Chicago, offers six trips to the 4-H Dairy Conference in Chicago.

ELECTRIC. The Illinois Farm Electrification Council gives awards to members in the home economics electric activity or the agricultural electric project. The state award consists of educational trips to Chicago for 20 members. Other awards consist of 4-H jackets for 100 members, 20 to a district.

HEALTH. The Illinois Health Improvement Association, Springfield, awards two $50 savings bonds for a boy and girl selected from the county winners.

PONY PROJECT. The Central States Pony Association, Springfield, gives a medal of honor to the highest ranking member in each county. The highest scoring member in the state receives a $25 savings bond.

POULTRY. Two organizations donate awards for achievement in the poultry project. The Illinois Poultry and Hatchery Federation, Shelbyville, awards four trips to the Junior Poultry Fact-Finding Conference. The Illinois State Turkey Growers Association, Ashkum, awards a certificate of merit and a medal to the highest ranking member within each county.

SAFETY. The Country Mutual Insurance Company, Bloomington, awards ten trips to the National Safety Congress.

SOIL IMPROVEMENT. The Illinois Association of Soil Conservation Districts, Danvers, gives pen and pencil sets to members with the winning soil improvement demonstrations in the state.

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FOR IMMEDIATE RELEASE

Steers Gain 7 Percent Faster On Haylage Than On Hay In UI Tests

URBANA--Recent University of Illinois research comparing the feeding value of hay and haylage showed that alfalfa haylage provides adequate protein for full-fed yearling steers and is more palatable than hay.

U. of I. animal scientist A. L. Neumann says yearling Hereford steers fed haylage ate 29 percent more roughage than steers fed hay. Haylage-fed steers also gained 7 percent faster than those receiving hay, shortening the feeding period about two weeks. Feed costs and carcass quality were comparable for the two groups.

Neumann explains that both the haylage and the hay were third-cutting alfalfa from the same field. The haylage was somewhat dry, containing only 27 percent moisture. However, quality was exceptional. The hay contained 14 percent moisture.

In concurrent tests, steers fed haylage, corn and supplement gained 7 percent faster than those fed haylage and corn without supplement. However, gains for the steers on supplement cost 3.5 percent more.

Another test conducted over the same period showed that full-feeding corn and supplement along with haylage was more successful than limited feeding. Gains were 17 percent faster for the full-fed steers. Limited feeding lowered costs slightly, but significantly reduced dressing percentage and increased the length of time in the feedlot.

U. of I. researchers used 40 yearling Hereford steers in the tests. They were fed from a starting weight of about 700 pounds to a final slaughter weight of about 1,100 pounds.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

U. Of I. Animal Scientist To Host South American Tour

URBANA--H. G. Russell, University of Illinois extension animal scientist, has been named to host a delegation of 36 Illinois livestock breeders and feeders during a 21-day goodwill mission to five South American countries. The group will leave from New York on March 1.

Russell says members of the delegation are scheduled for a number of meetings with their occupational counterparts in South America. They will also talk with United States and foreign government representatives in Brazil, Uruguay, Argentina, Chile and Peru.

During the three-week tour, the group will visit farming and dairying operations, cattle and sheep ranches, coffee plantations, stockyards and slaughter-packing plant operations. A number of sightseeing excursions, including a visit to the "Lost City of the Incas" in Peru and Rio De Janeiro's famed Sugar Loaf Mountain, also have been scheduled.

Russell says the entire goodwill mission is arranged by the United States Cultural Visitation Exchange Program and the National People to People Organization. Purpose of the tour is to promote understanding and goodwill between peoples of the United States and South America.

Area farmers who will take part in the tour include __________
____.

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Editor's Note: Attached is a list of the Illinois farmers taking part in the South American tour.

ILLINOIS DELEGATION FOR SOUTH AMERICAN GOODWILL TOUR

Willard Nelson, Geneseo
L. E. Mathers, Jr., Mason City
Kermit Bedel, Gibson City, Rt. 2
Kenneth W. Crow, Milford
A. K. Hohenboken, Geneseo
Herbert Carr, McNabb
Reed Gibbs, Victoria
Dawson Dean, Griggsville
J. Walter DeHart, Pittsfield
Melvin Teuscher, Fisher
James Yontz, San Jose
J. E. Klokkenga, Emden
Cary F. Andras, Murrayville
Howard P. Bartlow, Rushville
George Bruington, Monmouth
Ben Robinson, Kansas
Richard Best, Eldred
James Walsh, Jr., Carmi
John A. Jameson, Canton, Rt. 1
Homer Tice, Greenview
Emery E. Jones, Saybrook
William J. Pfeffer, Lebanon
Harvey Hartter, Carlock
Hugh H. Neely, Pecatonica
Howard Hurrelbrink, Winchester
R. Kenneth Riskedal, Leland
Lloyd Hanna, Farmersville
A. D. Oderkirk, DeKalb
Ray Buzzard, Altamont
William Weir, Gladstone
Don Zuidema, Morrison
George C. Ottens, Morrison
William C. Gross, D.V.M., Winchester
Earl Sorrells, Raymond
Norman Wineland, Hamburg
Lester Y. Lacy, Kansas

FOR IMMEDIATE RELEASE

Livestock Breeder Honored For Service To Illinois Agriculture

URBANA--Leslie E. Mathers Sr., Mason City, was presented the annual award for service to Illinois agriculture Friday by the Illinois Society of Professional Farm Managers and Rural Appraisers.

Mathers received a plaque and honorary membership during the society's annual award luncheon on the University of Illinois campus.

The plaque reads: "The Illinois Society of Professional Farm Managers and Rural Appraisers presents to Leslie Eugene Mathers Sr. its highest award in recognition of his distinguished leadership and outstanding work in the improvement of the nation's livestock."

Mathers is a well known breeder of Shorthorn cattle. He has imported many animals in an effort to improve the breed. He is interested in improving all kinds of livestock as one way of helping farmers.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Farm Price Policy Alternatives Ahead In the '60s

URBANA--Four major farm price policy alternatives appear as possibilities for 1964 and 1965, says an agricultural policy specialist at the University of Illinois.

Farm price policy, emphasizes R. G. Spitze, is not set by the president or the secretary of agricultural or any other single-interest group, but by the total political process--by people and organizations. The present administration, of course, helps to determine policy.

Spitze recognizes these as the agricultural policy choices for the years ahead:

1. Compulsory production controls, using allotments or quotas: this type of control attempts to hold production at some desired level to maintain a desired price. The present programs for cotton and tobacco are examples of compulsory controls.

2. Voluntary diversion payments: programs of this type provide payments for farmers to voluntarily reduce acreage and thereby control production to maintain a desired price. The 1964 feed grain program for corn is an example.

3. Marketing orders or agreements: this type of program gives producer groups a chance to gain more bargaining power in the market place. Many fruits and vegetables are produced under marketing orders.

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4. Removal of all public supports and control: the government would then be removed as a direct force in setting prices. Farmers could produce what they want and would take the going price in the market. Soybeans, in effect, are in this category. The price of soybeans has been above the support price because the market is expanding faster than farmers can produce them.

Wheat, Spitze points out, is one of the most pressing single problems for 1964. Unless new legislation is enacted, growers will vote again this year on the same two programs they voted on last spring to decide the wheat program for next year. In deciding on new legislation, they could select any of the four choices above, or a combination of them.

Spitze emphasizes that commercial farmers are affected most by farm price policy decisions. These farmers are in a cost-price squeeze--they have limited chances of expanding the market for their products except through population increase, and they sell on a competitive market in which each individual farmer has very little bargaining power.

But the market from which the farmer buys his production supplies generally is organized differently. The individual urban seller usually has more control over the price he receives.

Spitze believes that farm policy decisions will not substantially affect two major problems faced by approximately 40 percent of our rural people--unemployment and poverty. One of the causes of these problems is too-slow growth in job openings for which farm boys and girls are prepared.

Underemployment, low-efficiency farms and agriculturally reared workers who are poorly prepared for the skilled labor market are the main causes of rural poverty. Spitze observes that programs other than farm price policies are needed to relieve the problems of rural poverty and underemployment.

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FOR IMMEDIATE RELEASE

Budgeting Can Help Farmers Decide Participation In Feed Grain Program

URBANA--To participate or not to participate in the 1964 feed grain program--that will be a decision facing Illinois farmers during the next two months.

To help farmers decide whether or not to participate in the program, University of Illinois farm management specialists have developed a special budget form.

By using the form, farmers may estimate their income if they participate and if they do not. The form shows estimated fertilizer and other crop costs based on cost-of-production studies conducted by U. of I. agricultural economists.

After a farmer has worked through the form, he can see the difference between his crop income from participating and from not participating. Agricultural economists also suggest that he will want to consider the amount of storage space he has, the effect of participation on livestock, soil conservation and fertility, other farm operations, price and production risks and work load and also the effect on agriculture and society as a whole.

In working out budgets on typical farms of the state,D. E. Erickson, extension farm management specialist, reports that the financial advantages of participating will vary with the yields and prices a farmer expects to receive.

Price and production risks are another factor. Participation gives some protection from the effects of low prices and adverse weather on corn yields. However, it also takes away some profit opportunities

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from rising market prices and higher corn yields. Corn could yield several bushels per acre above the base yields on which the diversion payment is figured.

If the farmer's budget shows some advantage for diverting 20 percent of his base acreage, Erickson suggests that he work out a budget for diverting 40 percent of the base acreage. He points out that the rate of payment is 50 percent for all the diverted acreage if 40 percent or more of the base is diverted. Returns for the typical participating farm will probably be highest if the farmer signs up for either 20 or 40 percent, he observes.

A livestock farmer in particular needs to budget to determine his best decision, Erickson emphasizes. The program may offer definite financial advantages for the farmer who can buy corn at harvest.

Copies of the budget forms are available in all county farm advisers' offices.

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FOR IMMEDIATE RELEASE

Agronomists Test All-Out Corn Yields

URBANA--University of Illinois agronomists are continuing an all-out corn yield test to see whether it's possible to average 200 bushels of corn in a continuous cropping system. "In fact, we shouldn't place an upper limit on possible corn yields," says U. of I. agronomist L. B. Miller.

In the test, agronomists are studying various fertilizer rates, corn row widths and planting populations on land where corn has grown continuously since 1940.

This land had lime and phosphate for several years prior to 1959. Since then the agronomists have compared plots receiving no fertilizer with plots receiving 500 pounds of nitrogen, 250 pounds of potash and 250 pounds of phosphate each season. A portion of the heavily fertilized plots also received 40 tons of manure.

The highest 1963 yield, 160 bushels, came from heavily fertilized plots with 16,000 plants per acre and 20-inch rows, points out Miller. Close-row spacings were slightly higher than 40-inch rows, but the difference was not sufficient to justify changing row spacings. Average for the past three years on the plot with 16,000 plants per acre and no fertilizer was 107 bushels. The heavily fertilized plots yielded 141 bushels, and the heavily fertilized plots plus manure yielded 140 bushels. A higher plant population--24,000 plants per acre--gave no additional yield.

"Although we are using extremely high fertilizer rates, there are many limitations to higher yields in this experiment," explains Miller. Only one hybrid variety, and presumably the best, is used each year. Hybrid varieties react differently to seasonal conditions and to fertilizers.

Probably no direct recommendations will come from this experiment. But the results all add up to increased knowledge about the corn plant's capacity to produce higher yields, concludes Miller.

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2/4/64

FOR IMMEDIATE RELEASE

Large-Scale Farms Produce Small Portion Of Illinois Farm Products

URBANA--Large-scale farms account for only a small part of Illinois agriculture.

Only 553 Illinois farms, or one of every 250 of the state's 123,328 commercial farms, were large-scale operations in 1959, according to figures recently released by the Bureau of Census.

The Bureau classifies a farm as large scale if it sells $100,000 worth of farm products in a year.

Large-scale farms occupied 1.5 percent of Illinois farmland but produced 6 percent of the total value of all farm products sold in the state.

Few corn, dairy and hog farms are large-scale farms. These 553 large-scale farms produced less that 2 percent of the corn harvested for grain, 1 percent of the dairy products and about 2 percent of the hogs and pigs sold. But they produced more than 13 percent of the cattle and calves sold, nearly 28 percent of the vegetables and almost 50 percent of the forest products and horticultural specialties.

These 553 farms were big consumers. They used an average of 50 tons of commercial fertilizer and 77 tons of liming materials per farm. Purchases of gasoline and petroleum products averaged $3,668 per farm. They hired more than five workers per farm.

Large-scale farms do not always have large acreages. One of every five had fewer than 260 acres. Three of every five ranged from 260 to 999 acres.

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Writing in the winter issue of Illinois Research, Franklin J. Reiss, U. of I. agricultural economist, points out that large-scale farming is likely to increase in those type-of-farming operations where it is now most prevalent. He looks for expansion of large-scale farming where increased size gives greater economy of production; developing technology gives more control of production; specialization permits marketing advantages and management economies; cheap and unskilled, often migrant, labor can be employed; or added capital can substitute for labor.

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FOR RELEASE WEDNESDAY P.M., FEBRUARY 5, 1964

Agricultural Careers Week Set For March 8-14

SPRINGFIELD--Governor Otto J. Kerner today signed a proclamation designating the week of March 8 through 14, 1964, as AGRICULTURAL CAREERS WEEK.

The week expresses Illinois' profound interest in its rural young people and their future professional and social development.

According to Governor Kerner, "There is an urgent need for all rural young people to complete a high school education and to continue their education to the maximum of their abilities."

He continued, "The production, processing, distribution and sale of agricultural products and the sales and services of agricultural producers comprise an expanding industry of critical importance to the state and nation. The demand for technically and professionally educated young people to meet the employment opportunities of this industry far exceeds the present supply of such young people."

AGRICULTURAL CAREERS WEEK is sponsored by the Illinois Farm-City Committee in cooperation with the University of Illinois College of Agriculture and other state universities in Illinois.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Illinois 4-H Foundation Approves $10,600 Budget For 1964

URBANA--One new member was elected and five members were re-elected to the 29-member Illinois 4-H Foundation Board of Directors this week, February 5, in a meeting that ended with approval of a $10,600 Foundation budget for 1964. The meeting was held at the University of Illinois, Urbana.

The new director is E. D. Funk, Jr., Bloomington, president, Funk Brothers Seed Co.

Re-elected to the board were T. M. James, Champaign, public relations director, Bank of Illinois; August C. Meyer, Champaign, president, Midwest Television, Inc.; Mrs. Dorris E. Robinson, Taylorville, homemaker; C. A. Snavely, Peoria, executive vice-president, Illinois Retail Farm Equipment Association; and Arlene Wolfram, Urbana, assistant state 4-H Club leader, University of Illinois.

A new ex-officio member of the board is Mrs. Herman Stiehr, Waukegan, president, Illinois Homemakers Extension Federation.

The Illinois 4-H Foundation was established in 1954 to help support the state's 4-H Club program through awards and incentives made possible by private funds.

In 1963 the Foundation provided nearly $4,000 to underwrite part of the increased cost of an expanded State 4-H Club Week.

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The Foundation board continues to underwrite part of the expenses for Illinois' International Farm Youth Exchange (IFYE) delegates. In 1963, eight Illinois young people lived with farm families in Denmark, England-Wales, Malaysia, Peru, Poland, the Philippines, Turkey and Venezuela. Fourteen exchangees from foreign countries lived with 55 host families in Illinois.

During 1963, Foundation funds also sent outstanding 4-H Club members to the National 4-H Conference in Washington, D. C., the National 4-H Club Congress, the American Youth Foundation Camp and the National Junior Vegetable Growers' Convention. Furthermore, the Foundation board handles funds for several state-wide events, such as the 4-H Junior Leadership Conference and the Rural Youth Winter Rally.

For the second year, the Foundation gave 10 local 4-H leaders scholarships to attend the Leisurecraft and Counseling Camp in Monticello.

4-H Club work is the youth phase of the Cooperative Extension Service, conducted jointly by the University of Illinois College of Agriculture and local sponsoring groups.

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FOR IMMEDIATE RELEASE

4-H And FFA Calf Sale Set For February 29 At U. Of I.

URBANA--The 16th annual 4-H and FFA Dairy Calf Sale will be held in the University of Illinois Stock Pavilion in Urbana on Saturday, February 29. The sale starts at 11:00 a.m.

U. of I. extension dairy scientist Jerry Cash says the annual sale is sponsored by the Illinois Purebred Dairy Cattle Association to give 4-H'ers and FFA members a chance to get first-rate project stock at fair prices.

About 80 calves will be sold. Quotas by breeds include 25 Holstein, 15 Guernsey, 15 Jersey, 15 Brown Swiss and 10 Ayrshire calves.

Only bona fide Illinois 4-H and FFA members are eligible to buy calves. However, if the member cannot attend, he may designate another person to buy an animal for him.

All purchasers must certify that they will use the calves for 4-H or FFA dairy projects. For sale catalogs, write to J. G. Cash, Department of Dairy Science, University of Illinois, Urbana.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE SATURDAY, FEBRUARY 15, 1964

February 15-22 Is Illinois FFA Week

URBANA--"Agriculture--Dynamic...Challenging" is the theme of Future Farmers of America Week. Governor Otto J. Kerner has proclaimed February 15 through 22 as Illinois FFA Week.

In his proclamation, Governor Kerner said, "The future progress and prosperity of Illinois depend to a great degree on the dynamic and challenging business of agriculture."

He pointed out that the Illinois FFA has been outstanding in developing leadership, encouraging cooperation, promoting good citizenship and inspiring patriotism among its members.

Illinois' 16,071 FFA members, all students of vocational agriculture, are carrying out special projects this week to call attention to the importance of agriculture. There are 441 local chapters in the state.

The national FFA organization had its start in 1928, when 33 delegates from 18 states met in Kansas City, Missouri, and adopted a constitution. Nationwide, FFA has 395,812 members in 8,372 local chapters and Puerto Rico. Illinois joined the organization in 1929.

The FFA program is an important part of high school vocational agriculture. Members of the local chapter plan a program of work under the supervision of their adviser, the vocational agriculture teacher.

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Note to Editors: For information on how FFA members in your area are observing FFA Week, contact the vocational agriculture teacher in your local high school.

FOR IMMEDIATE RELEASE

Farmers Can Collect Damages For Livestock Injured By Dogs

URBANA--Illinois farmers whose livestock are attacked by another person's dog can collect damages from their county dog tax fund.

N. G. P. Krausz, University of Illinois professor of agricultural law, says farmers must file a written claim for damages within 10 to 40 days after the injury or killing occurs.

This claim must be filed before a township supervisor or a magistrate in commission counties. At least two county landowners who witnessed the damages must testify.

Money can also be collected for animals that die from rabies or have to be killed because they are infected with it.

Damage claims are paid on the first Monday in March, Krausz reports. The maximum payment is $150 per head for cattle, $100 for horses and mules, $25 for hogs, $15 for goats and $5 for turkeys. Damages for sheep and poultry are figured at market value. Payments for purebred animals are 50 percent higher.

When the county dog tax fund doesn't cover all of the claims, available funds are divided proportionally.

Even though farmers collect from the county dog tax fund, they can still file suit against the dogs' owners. If the suit is successful, the amount paid is first used to reimburse the county dog fund. Any excess goes to the owner of the injured animals.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS　　COLLEGE OF AGRICULTURE　　URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

FFA Short Course Scholarships Awarded To Ten Young Farmers

URBANA--The Illinois Foundation FFA recently awarded ten $50 scholarships to students enrolled in the University of Illinois Winter Short Course in Agriculture. The short course meets on the Urbana campus from January 27 to March 6.

Scholarship winners are former vocational agriculture students who are active in the Future Farmers of America. Winners from this area include (see attached list):

The Illinois Foundation FFA selected these scholarship winners on the basis of their high-level achievements in vocational agriculture and FFA. All are out of high school, but are members of the Illinois FFA. FFA members can retain their membership for three years after completing high school.

The foundation is a non-profit organization designed to promote agricultural progress through recognition of outstanding FFA members. More than 1,100 business firms and individuals contributed financial support to the foundation last year.

FFA scholarships help encourage young farmers who cannot attend college regularly to enroll in the six-week short course to learn the latest in farming ideas and methods. Students can choose from 21 courses in the areas of agricultural economics, agricultural engineering, agronomy, animal science, dairy science, horticulture and veterinary medicine.

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Short Course Scholarship Winners

Address	Name	High School Attended
Brimfield	John R. Miller	Brimfield
Cambridge	Francis R. Boelens	Cambridge
Crete	Robert R. Most	Crete-Monee
DeKalb	Kenneth E. Hulmes	DeKalb
Fairbury	Harvey J. Schieler	Fairbury-Cropsey
Freeburg	David E. Culli	Mascoutah
Monmouth	Kent E. Willis	Monmouth
McLeansboro	Gary L. Organ	McLeansboro
Shumway	Delbert E. Soltwedel	Effingham
Waterloo	Walter J. Wetzel Jr.	Waterloo

FOR IMMEDIATE RELEASE

Watch Your Pets, You're Liable For Them

URBANA--Unless a local leash law exists, pet owners do not have to keep their dogs and cats confined. But they are legally responsible for any damage caused by the animals, according to H. W. Hannah, University of Illinois College of Veterinary Medicine law professor.

In a recent issue of the JOURNAL OF THE AMERICAN VETERINARY MEDICAL ASSN., Hannah discusses common law rulings on pet owners versus irate neighbors. Common or unwritten law applies to situations not covered by state laws or local ordinances.

Under common law, a dog or cat owner is not liable simply because his pet crosses a neighbor's property, Hannah says. However, the owner can be held liable if his pet ruins the neighbor's petunia bed or stampedes his sheep, causing a lamb to be trampled to death. If the pet repeatedly damages Neighbor Jones's property, he can get a restraining order compelling the owner to keep the animal off his property, Hannah continues.

Another situation involving potential liability is the roaming pet that growls or hisses at an elderly passerby, causing him to falter and sprain his ankle. Many variables must be considered, according to Hannah. The injured person can recover damages if the court decides the growl or hiss was responsible for the injury.

"Certainly if a dog or cat attacks a person going peaceably about his business, the odds are in favor of recovery despite the common law theory that it takes a first bite to inform the owner his dog

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will bite...." Hannah says. Some states, including Illinois--with generous help from city mailmen--have changed the "one-bite" common law theory to liability for the first bite unless the injured party is a trespasser or has teased the animal, he said.

These situations also may spell trouble for pet owners:

1. Rover joins up with a pack of dogs which cause property damage. Owners of all the pets involved can be held liable, according to Hannah. However, if Rover's owner is unfortunate enough to be "the only identifiable owner of a member of the pack, he can be sued for the whole damage."

2. Rover has a communicable disease. If a pet owner realizes that his dog or cat has a disease it can transmit to people or other animals, and he permits it to roam, he can be held liable.

3. Rover kills the neighbor's pet while on the neighbor's property. Rover's owner would probably be held liable. If the killing occurred anywhere else, Hannah says, it would be difficult to prosecute the owner, since "dogs and cats are presumed to act the way nature ordained while in each other's presence." An exception might be the owner of a pet known to be vicious.

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2/21/64

FOR IMMEDIATE RELEASE

Swine Equipment Plans
Book Now Available

URBANA--One of the most comprehensive swine equipment plan books ever published is now available from the University of Illinois College of Agriculture.

The 68-page book, a combined effort of agricultural engineers from 13 land-grant colleges, contains drawings complete with dimensions and details for dozens of swine equipment items. These include plans for self-feeders, finishing feeders, individual sow stalls, sow feeders, creep feeders, waterers, breeding racks and many other types of equipment.

U. of I. agricultural engineer Art Muehling says the book also contains illustrated information about layouts for farrowing, finishing and nursery units. These layouts include designs and dimensions for both pens and buildings.

Information on manure handling and disposal, including slotted floors, ventilation, rodent control, concrete mixes, augers and floor heating also is available in the book.

Muehling says the Swine Equipment Plans book sells for $1.00, including 4 cents tax. Swine growers interested in receiving a copy should send their order to the Department of Agricultural Engineering, University of Illinois, Urbana.

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FOR IMMEDIATE RELEASE

Extension Conference To Explore Rural Defense Education Methods

URBANA--Extension Rural Civil Defense workers from ten North Central Region states will meet in Chicago February 24-25 to explore improved ways of implementing the Rural Civil Defense education and information program.

According to Fred A. Painter, state leader for the Cooperative Extension Service Rural Civil Defense program, the objectives of the program are to educate and motivate rural people to take steps that will increase their chances of survival in case of nuclear attack or natural disaster. This effort includes helping rural people to:

1. Become aware of and understand the potential risks.
2. Learn the hazards and how to provide protection from them.
3. Increase the use of preventive practices; provide emergency supplies and equipment and adequate shelter protection.
4. Inventory existing facilities for protection and survival against hazards.
5. Make written step-by-step plans for family and farm protection.
6. Be prepared to act on knowledge rather than panic.

Painter said the U. S. Department of Agriculture was given the Rural Civil Defense assignment by the Department of Defense in 1961. It involves a rural defense education and information program aimed at 67 million rural people living on farms, in rural non-farm areas and in towns and cities with populations up to 10,000.

In carrying out this program, University of Illinois extension specialists in the areas of home economics, 4-H, agricultural engineering and extension information assist in incorporating rural civil defense into county extension activities.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Turner Hall Dedication Set

URBANA--Top state and national agricultural leaders will take part in Turner Hall dedication ceremonies here March 6, according to M. D. Thorne, head of the University of Illinois agronomy department.

The new plant science building is named after one of the founding fathers of the land-grant college system, Jonathan Baldwin Turner. When completed, the building will house all the plant science departments in the College of Agriculture, Thorne said.

The formal dedication ceremonies will be held from 1 to 3 p.m. March 6 in the University Auditorium. Prominent speakers will provide a look into the future of agriculture. Nyle Brady, Director, Division of Science and Education, USDA, Washington, D. C., will present "Continuing Opportunities for Cooperative Research in Agriculture." Earl Hughes, Woodstock, farmer and former Assistant Secretary of Agriculture and member of the University of Illinois Board of Trustees, has chosen "Planting a Straight Row" as his topic. M. B. Russell, Associate Director, Agricultural Experiment Station, University of Illinois, will present "Horizons in Agronomy." U. of I. President D. D. Henry will also appear on the dedication program. Dean L. B. Howard of the U. of I. College of Agriculture will serve as master of ceremonies.

In addition to the formal dedication ceremonies, the public is invited to open house at Turner Hall from 9 a.m. to noon and from 3:30 to 6 p.m. on March 6 and from 9 a.m. to noon on March 7, said

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Thorne. During these periods the agronomy staff will show research, teaching and extension work now carried on by the department.

Guests at the Turner Hall ceremonies may park--free--in the lot just south of Florida Avenue at the southeast corner of Mount Hope Cemetery. Florida Avenue runs east and west, connecting with Kirby Avenue, which runs between the Stadium and the new U. of I. Assembly Hall. Motorists may reach Florida from Vine, Race and Lincoln streets in Urbana and from Prospect and Neil streets in Champaign.

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FOR IMMEDIATE RELEASE

Farmers Need to Analyze Credit Needs

URBANA--Profitable farm financing calls for analyzing credit needs of borrowers, says a University of Illinois extension specialist in farm management and finance.

J. M. Holcomb suggests that farm borrowers analyze their credit needs in terms of the three R's of credit--returns, repayment capacity and risk. The first, returns, refers to the amount of credit that the borrower can profitably use in the farm business. Repayment capacity and risk indicate restrictions or limitations to be considered for a sound loan.

Complete or partial budgets will help to determine whether credit will produce profitable returns. A complete budget should indicate whether using credit would be profitable, how much credit would be required and when it is needed. Good partial budgeting will compare changes in costs and returns for an anticipated investment. Farm records can provide much of the information needed for budgeting.

Farm profit and loss records, statements showing changes in net worth, and the current operating budget will give evidence of repayment capacity--ability of the farmer to repay the loan. The type of loan is also a factor. Short-term loans are usually self-liquidating--they are used for such production items as seed or fertilizer, which should produce enough gross income to repay the loan and the interest. Longer term loans are usually not self-liquidating and must be repaid out of net farm income.

Too much of one type of loan may limit the farmer's capacity to repay the other. For example, diverting income to repay a long-term

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loan may limit his ability to repay a short-term loan. Holcomb lists three types of loans commonly used by Illinois farmers: short-term production loans, used to meet current operating expenses and repaid within one year; intermediate loans, used to buy machinery or for semipermanent investments and repaid in one to seven years; and long-term loans, used to purchase land or construct major buildings and repaid in periods up to 40 years.

Risks in using additional credit may arise because of uncertain production, prices, technology, personal relationships and health. A borrower's financial strength is determined by his equity or net worth and his proven ability to make money.

Net worth is the difference between a borrower's total liabilities and his total assets. A borrower with a high net worth ratio can more safely assume risk than one with a low net worth ratio. The net worth ratio refers to the proportion of the farm business owned compared with the amount borrowed.

Holcomb explains that the backbone of risk-bearing ability is a relatively high amount of net worth. Other desirable risk-bearing traits include the ability to earn and save money, a stable and reliable income, ability to borrow in both good and bad times and ability to reduce operating and living expenses in times when income is low.

He emphasizes that borrower and lender should both evaluate the borrower's management ability. This is especially important in the case of borrowers with low net worth.

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FOR IMMEDIATE RELEASE

Agricultural Guest Day Set For March 14 At University Of Illinois

URBANA--High school students throughout Illinois will get the latest information on college costs, admissions, scholarships and housing at the annual University of Illinois Agricultural Guest Day program set for March 14 here.

The program begins at 8:30 a.m. with registration in the University Auditorium. Home Economics Hospitality Day and Engineering Open House, also scheduled for March 14, round out an active day for high school visitors to the U. of I. campus.

Featured speaker for the Ag Guest Day program is H. E. Gulley, head of the U. of I. Division of General Studies. Gulley will discuss the importance of a college education in a changing world.

C. D. Smith, assistant agricultural dean, will discuss college admissions, costs, scholarships and housing. Kenny McMillan, past national FFA president, will speak on the benefits of a college education. McMillan is a sophomore in the U. of I. College of Agriculture.

Main features of the Ag Guest Day program are "special-interest" sessions where Ag College staff members will answer questions about courses and careers. Subjects for the sessions include animal and dairy science; horticulture; agricultural economics, law, education, extension and communications; veterinary medicine; agricultural engineering; and many others.

Each session will be repeated so that all visitors will have an opportunity to attend at least two. Also, U. of I. students will

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be available throughout the day to answer questions about college courses.

"Illini Review," a joint program for both Ag Guest Day and Home Economics Hospitality Day visitors, will conclude activities for the day. The review will feature campus fashions for men and women. College students will model the fashions.

All interested parents, teachers and high school students are invited to attend the Agricultural Guest Day program. Box lunches will be available for $1.00 at registration tables in the auditorium.

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FOR IMMEDIATE RELEASE

Cost of Plant Nutrients Decreasing

URBANA--While the cost of fertilizers has increased about 52 percent above the 1910-14 base period, the average per-unit cost of plant nutrients has declined in the past few years.

Donald G. Smith, University of Illinois professor of farm management, said the increased use of high-analysis materials was the main reason for the decline in per-unit cost of plant nutrients.

In Illinois during the ten years from 1951 to 1961, Smith reported a 611 percent increase in the use of nitrogen, a 58 percent increase in soluble phosphate--P_2O_5--and a 164 percent increase in potash. In the same period, use of rock phosphate decreased 17 percent.

He said the use of fertilizers increased because the cost of fertilizer decreased and grain prices encouraged farmers to grow large acreages of grain crops. The costs of most other things farmers use in production increased during the ten-year period. For example, fertilizer costs decreased by 3 percent, while machinery costs went up 30 percent and labor costs 32 percent.

To determine whether applying more fertilizer will increase income, Smith said farmers should budget the costs of added fertilizers against expected returns. The highest return occurs when added costs equal added returns. He noted that detailed cost studies at the University of Illinois show that farms with the highest corn yields had lower costs and higher returns per bushel than those producing lower yields.

As a budgeting aid, Smith suggested Illinois Circular 885, "Choosing the Most Profitable Fertilizer Program," which is available from the county farm adviser's office or from the University of Illinois College of Agriculture.

Another planning tool is the partial budget. Smith explained that in a partial budget the added costs and reduced returns are compared with added returns and reduced costs resulting from the anticipated change.

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FOR IMMEDIATE RELEASE

U. of I. Veterinary College Receives $96,500 Grant

URBANA--The University of Illinois College of Veterinary Medicine today received a $96,500 research and scholarship grant from the Illinois Racing Board. The funds were appropriated to the board by the 1963 General Assembly.

The grant will be used for research projects on two common equine diseases that have human counterparts--epiphysitis and epistaxis--in addition to providing summer scholarships for veterinary medicial students interested in equine practice.

Dr. H. J. Hardenbrook, chief investigator on Project Epiphysitis, said that the disease causes abnormal bone development, making the bones prone to fractures, arthritis and deformities.

Dr. Hardenbrook and his co-workers hope to determine the major causes of poor and abnormal bone development and the stresses that make such bones susceptible to injury. This information could be related to certain bone conditions in man, Dr. Hardenbrook said.

Epistaxis, or hemorrhaging from the nose, weakens the afflicted horse. If bleeding occurs more than once, the thoroughbred is disqualified for the entire racing season, according to Dr. R. P. Link, veterinarian heading Project Epistaxis.

Dr. Link and his associates will study the causes and possible prevention of epistaxis. Relationships between it and hemophilia--bleeder's disease--and nose bleed in man may be determined.

Part of the grant will provide annual scholarships for qualified U. of I. veterinary students interested in equine practice and research. Scholarship recipients will receive specialized training in a summer contact program at thoroughbred breeding and training farms and race tracks.

An encouraging prospect of these investigations, recognized by those supporting the appropriation, is that they will yield knowledge directly benefiting human health and welfare. At the same time, they should reduce disease and suffering of horses and other animals.

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NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Foresee New Plant Developments For Human Use

URBANA--Scientists in the field of molecular biology will soon be able to manipulate plant growth in ways never before possible.

This is one of the "puffs of smoke" on the horizon, Dr. M. B. Russell, associate director of the Illinois Agricultural Experiment Station, told guests at the dedication today (Friday) of Jonathan Baldwin Turner Hall on the campus of the University of Illinois.

All mankind will have a chance to benefit from these new approaches to genetic control of plant reactions, Dr. Russell pointed out. It is the role of agronomists to use the best of the new concepts from all the sciences to enhance the understanding and control of the soil-plant-atmosphere system in producing food in plants.

Turner Hall is the first of four units that will eventually house all of the plant science departments of the College of Agriculture: agronomy, forestry, horticulture and plant pathology. The Department of Agronomy will occupy the first unit, which is being dedicated today.

The fundamental basis of agriculture, especially agronomy, lies in the human need for food, the experiment station head stated. Agronomy is challenged by the question of what man can do to manage the system of food chemistry. We have made great progress, he said, but what lies ahead will far overshadow results to date.

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Other speakers on the dedication program at 1 p.m. in the University Auditorium included Dr. David D. Henry, president of the University of Illinois; Dr. Louis B. Howard, dean of the Illinois College of Agriculture; Earl M. Hughes, Woodstock, chairman of the agricultural committee of the University's Board of Trustees; and Dr. Nyle C. Brady, director of science and education, United States Department of Agriculture, Washington, D. C.

Turner Hall has been officially named in honor of the man who is generally acclaimed to be the father of the land-grant college system, Dean Howard told the guests. After graduating from Yale University, this native of Massachusetts spent the rest of his life in Illinois. In addition to his great efforts in support of higher education for the agricultural and industrial classes, Mr. Turner directed much of his attention to the plant sciences, so it is indeed appropriate that this building should bear his name.

It is the responsibility of the Department of Agronomy to work with soils and with such field crops as corn, soybeans, wheat and oats, Dean Howard pointed out. The department teaches courses in crops and soils and develops new methods for maintaining or improving soil fertility and tilth. It also develops and selects the best seeds for different types of soils and climatic conditions and seeks new knowledge about cultural practices.

In addition to attending the formal dedication ceremonies, visitors attended open house in Turner Hall from 9 a.m. to noon and from 3:30 to 6:00 p.m. Friday and 9 a.m. to noon on Saturday, March 7. In a tree-planting ceremony at 10 a.m., Dr. M. D. Thorne, head of the Department of Agronomy, planted several young trees at the northwest corner of Turner Hall from stock originally grown in Jonathan Baldwin Turner's horticultural garden in Jacksonville.

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FOR IMMEDIATE RELEASE

Dean Gardner Speaks At Ag Alumni Luncheon

URBANA--Dr. Karl E. Gardner, associate dean of the University of Illinois College of Agriculture, will be the featured speaker at the luncheon meeting of the College of Agriculture Alumni Association Saturday noon, March 14, in Room 314 Illini Union. Dean Gardner has just returned from a brief assignment to Sierra Leone, Africa.

Another highlight of the noon session will be the presentation of annual awards of merit to five alumni for outstanding achievement in industry, business, farming and education.

New board members will be elected at the 8th annual business meeting of the association starting at 10 a.m. in the faculty lounge of the Illini Union. The slate of new directors will be presented by the nominating committee: Fred Hoppin, Lincoln; Dick Herm, Peoria; Wilfred Shaw, Marshall; and Dean Gardner. President Karl Adams, Bloomington, will call the meeting to order.

Among association activities this year has been sponsorship of Agricultural Career Days in several counties. Alumni who attend the meeting will have a chance to take part in some of the activities of Ag Student Guest Day on the campus, also scheduled for Saturday, March 14.

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FOR IMMEDIATE RELEASE

Announce Need For 60 4-H Peace Corps Volunteers

URBANA--The need for 60 volunteers for 4-H Peace Corps projects in Latin America and the Middle East was announced today by Hugh Wetzel, Illinois 4-H Peace Corps coordinator on the state 4-H staff at the University of Illinois.

Training for these projects begins in mid-June, according to Wetzel.

The new volunteers will join 100 4-H Peace Corps members already serving on projects in Venezuela, Brazil and Uruguay.

Wetzel says volunteers will serve two years, beginning with two to three months of intensive training in language, world affairs, U. S. history and culture, technical job skills and physical and mental health.

Volunteers for Peace Corps projects must be U. S. citizens, high school graduates 18 years of age or older and in good physical and mental health. The projects call for volunteers who have a background in 4-H, FFA or FHA.

Applications should be in the state 4-H office by April 1 if possible. County farm and home advisers have application forms.

The Peace Corps volunteers will be responsible for recruiting and training local 4-H Club leaders, helping to establish "county"-level 4-H projects and visiting members to give technical assistance with their project work. The volunteers work in teams with their counterparts in their host country.

4-H Peace Corps volunteers are guided in their work by a project director and three regional supervisors representing the National 4-H Foundation. The Foundation is responsible for the program under contract with the Peace Corps.

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NEWS FROM AGRICULTURE
NIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

FFA State Awards Day May 2 At Urbana

URBANA--The top 80 district FFA foundation award winners will vie for 16 state FFA foundation awards on Saturday, May 2, at the University of Illinois, Urbana.

The Star State Farmer will also be selected, but will not be announced until June 11 at the State FFA Convention at Champaign-Urbana.

The Illinois Future Farmers competing for the state awards on May 2 have already won their chapter, sectional and district awards. The Illinois FFA Foundation gives plaques and awards in 17 areas: The Star State Farmer; beef, corn, dairy, poultry, sheep, small grain, soybean and swine production; farm and home beautification, farm and home electrification, farm mechanics, farm safety, soil and water management, crop farming, crop specialty and livestock farming.

FFA boys competing for these honors represent more than 16,000 vocational agriculture students. FFA award activities supplement the planned educational program of vocational agriculture in 441 Illinois high schools.

Judges for the state awards include vocational agriculture supervisors, teacher trainers, College of Agriculture staff members and vocational agriculture teachers.

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FOR IMMEDIATE RELEASE

Recommended Soybean Varieties For 1964

URBANA--With soybean planting just around the corner, most Illinois farmers are out looking for seed. W. O. Scott, University of Illinois extension agronomist, says that they should check with their county farm advisers to see what varieties are recommended for their area.

Scott says many farmers may be interested in the new varieties that are resistant to phytophthora rot. The disease is found in all parts of the state, and it is a potential threat to soybeans if rainfall is above normal.

These new varieties are Harosoy 63, Hawkeye 63 and Clark 63. They look like and perform the same as the original varieties except that they're resistant to phytophthora rot.

For the extreme northern part of Illinois, Scott recommends Chippewa. This variety is about 10 days earlier than Lindarin and Harosoy. In the northern half of the state, Lindarin, Harosoy, Harosoy 63, Hawkeye and Hawkeye 63 are the recommended varieties. Farther south, Adams, Shelby, Clark and Clark 63 are the recommended varieties. In extreme southern Illinois, Scott recommends Kent, which is about 10 days later than Clark.

Farmers should also be on the alert for low germination results. Because of last fall's dry weather, many beans were cracked in harvest, particularly those raised south of Urbana.

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Over 50 percent of the soybeans tested by the Illinois Crop Improvement Association from the southern third of the state germinated 79 percent or less. In contrast, most of the beans grown in the northern third of the state are germinating above 85 percent. Scott says that farmers can normally expect 90 percent of their soybeans to germinate above 85 percent.

Any farmer who expects to use his own soybeans for seed should have a germination test made. Otherwise, Scott says, he may be faced with the problem of low seed germination.

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FOR IMMEDIATE RELEASE

Don't Rush Garden Planting

URBANA--Unless you're a real gambler, don't try to beat the "freeze odds."

The revised "Illinois Vegetable Garden Guide" advises that there is still a 50 percent chance of frost after April 5 in the southern tip of the state. Average dates of the last 32-degree spring freeze in central Illinois are April 25 to 30. If you live in northern Illinois, you're still taking a 50 percent chance of frost as late as May 5.

The newly revised circular lists 10 steps to a successful garden--from choosing a good location to harvesting garden produce at peak quality. It also discusses garden problems and their control and concludes with tips on growing specific vegetables.

Copies of Circular 882, "Illinois Vegetable Garden Guide," are available without charge to Illinois residents at the office of the county farm and home adviser.

Authors of the publication are extension horticulturist J. S. Vandemark, extension plant pathologist M. C. Shurtleff and entomologist W. H. Luckmann of the Illinois Natural History Survey.

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FOR IMMEDIATE RELEASE

Now Is The Time To Plant That Early Spring Garden

URBANA--With the first signs of spring, Joe Vandemark, University of Illinois extension horticulturist, says that it's time to get out and start working in your garden.

Right now is a good time to start an early spring garden. Vandemark says that it's best to put out all of your perennials just as soon as the weather permits. Early April is the time to put out asparagus, perennial onions and rhubarb. Be sure to plant these vegetables in an area where they will not be disturbed.

Other vegetables that you can plant now are early cabbage from seed, kohlrabi, leaf lettuce, mustard, onion seeds, onion sets, peas, early potatoes, radishes, spinach and early turnips.

Start frost-susceptible vegetables like tomatoes, eggplant, peppers, squash, watermelon and muskmelon inside right away so that you can set them out just as soon as the weather warms up.

A good rule to follow in starting vegetables inside is to plant them twice as deep as the diameter of the seed. Most seeds should be planted 1/4 inch deep. However, some of the larger ones may need to be planted as much as 3/4 inch deep.

Vandemark suggests starting plants in clay pots. If you don't have enough pots, you can cut the tops and bottoms out of old tin cans. When the cans are filled with dirt and placed on top of an old bread tin, they make an effective starting bed. Put the plants in a west or south window so that they will get enough light and heat.

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Just as soon as the weather warms up, move these plants outside.

For more information on gardening, stop in at your local extension office and ask for a copy of University of Illinois Circular 882, Illinois Garden Guide.

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FOR IMMEDIATE RELEASE

Know Tornado Precautions

URBANA--Tornadoes are coming. In fact, they have already hit in Illinois this year. They are likely to cause more destruction and loss of life during April, May and June than during all the rest of the year.

Knowing what to do if you hear a warning or see a tornado approaching may save your life. O. L. Hogsett, University of Illinois safety specialist, offers the following tornado life-saving precautions:

1. Take shelter in the southwest corner of your basement, or go into your storm cellar or fallout shelter. If your home doesn't have a basement or shelter, take cover under heavy furniture against inside walls on the lowest floor, away from doors and windows.

2. If you have time, open windows on the north and east to reduce damage. This will help to equalize the pressure inside the house with the atmospheric pressure outside. Shut off electricity and fuel lines coming into the house.

3. Stay away from windows.

4. If you are in open country when a tornado comes, travel at right angles away from the storm. Since most tornadoes move from southwest to northeast, you should probably move toward the northwest or the southeast. If you don't have time to escape, lie flat in a depression in the ground or in a ditch or ravine.

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FOR IMMEDIATE RELEASE

Income Prospects Best For Hogs and Soybeans

URBANA--Hogs and soybeans share the brightest income spots of any farm products in the coming year. Dairy and corn prices will probably show little change, while beef should stay below the level of recent years.

This, in a nutshell, is the agricultural outlook L. H. Simerl, University of Illinois extension economist presented to the Illinois Bankers Agricultural Credit Conference Tuesday at Urbana.

Simerl said that better than usual hog prices should be the rule for the next year, especially next fall and winter. Hog producers have indicated that they will cut farrowings about 6 percent this spring and about 13 percent this summer. Lighter marketings should help keep hog prices at least as high as last year's, and probably $1.00 to $2.00 higher.

Soybean production has not kept up with demand since 1961. Simerl said growers have indicated that they will increase soybean plantings about 8 percent in 1964. Since last year's carryover was not great, this new record-high acreage should just about satisfy increasing demand.

Dairy farming, the most stable of our livestock farming operations, will see little change in prices, costs and profits. Dairy cow numbers are still declining, but the sharp drop in beef prices last year will slow the shift from dairy to beef on many farms.

Compared with a year ago, the most depressing single factor in the corn market is the 13-cent lower price support level. Total stocks of corn were up about 3 percent on January 1 of this year. In addition, low livestock prices are causing farmers to reduce livestock production and the use of corn for feed.

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Simerl believes that cattle slaughter will increase by about 10 percent "in a few years." Average slaughter weights will probably decrease slightly. Beef production will probably be large enough to keep prices in the lower $20's.

On the whole, Simerl said, changes in farm production have not been a major cause of fluctuating farm income. Farm income depends more on the prices and wages received by nearly 200 million consumers of farm products in the United States and in many foreign countries.

Thus the prices of most U. S. farm products are influenced by international economic conditions. The prices of corn, soybeans and meat animals are nearest the world market values. Among the more important products sold by Illinois farmers, wheat is the most overpriced in relation to world market and values. He adds that this overpricing is reflected in the present controversy over new wheat legislation.

On the other hand, marketing expenses and farm operating costs are mostly "made in the U.S.A." As a result, Simerl said, "Our agriculture, like other exporting industries, gets pinched when our marketing and production costs are raised by inflation."

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FOR IMMEDIATE RELEASE

Pick Your Garden Spot Carefully

URBANA--In choosing a site for your garden, look for a spot that has loose, level, well-drained soil.

University of Illinois extension horticulturist Joe Vandemark says that your success in finding a suitable site will determine the quality of your vegetables.

A loose, well-drained soil makes it possible to get into your garden earlier in the spring. It also makes weed removal easier all year long.

If possible, Vandemark suggests that you avoid sites that have heavy clay or very sandy soils.

The garden should have plenty of sunlight. Don't plant near buildings, trees or shrubs that may shade your garden. Trees and shrubs also compete with garden vegetables for plant food and moisture. Especially avoid walnut trees, as their roots produce a toxin that will injure tomatoes. If you have a shady spot in the garden, use it for leafy vegetables.

Also consider the water supply. In dry periods you can save a garden if water is easily available. And you can improve quality and yields by using water.

Locate the garden near your home so that you can work in it whenever you have a few free minutes. You will probably also use the vegetables more if they are near your kitchen.

Vandemark recommends including the garden in your landscaping planning. Many gardeners use vegetables in their flower beds. Three or four tomato plants grown on stakes can supply all the tomatoes you

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need during the season. Asparagus makes an attractive background along a fence. You might also put in a few onion sets and a little lettuce. These bright green vegetables make an attractive showing before flowers come up.

For more gardening tips, Vandemark suggests that you stop in at the county extension office and ask the farm adviser for a copy of University of Illinois Circular 882, "Illinois Vegetable Garden Guide."

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Bankers' Conference Announced

URBANA--More than 150 bankers are expected to attend the 18th annual Illinois Bankers' Agricultural Credit Conference on April 7 and 8 in the Illini Union building at the University of Illinois.

J. M. Holcomb, University of Illinois agricultural economist, says that the bankers will explore ways in which they can do a better job of providing complete credit service to farmers.

The core of the program will be workshop sessions. Bankers will scrutinize case studies of three types of farms: dairy, beef-hog and grain. They will then decide whether they would lend money to a farmer who might be running one of these operations.

Individual topics on the program include farm costs, effective use of farm budgets, challenges in farm financing and farm finance programming. A panel of bankers will discuss agricultural trends and problems.

The College of Agriculture and the Illinois Bankers Association planned the program. Faculty members from the University will help conduct the conference and will speak on several of the topics.

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NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Multi-Use Shelter-Storage
Plans Available

URBANA--Plans for a multi-purpose structure for storing fruits and vegetables or for sheltering six persons in an emergency, such as a tornado or nuclear fallout, are available from the University of Illinois.

This plan is especially suitable for scattered rural homes without basements that can be converted into adequate emergency shelters.

Since part of the shelter would be taken up by stored produce at the time of an emergency, Plan No. 5948 allows two and one-third times the accepted minimum space per person. Any stored fruits and vegetables would form a supplemental emergency food supply.

Gravity air flow provides ventilation. But if more than six persons may have to use the shelter during an emergency, a mechanical blower should be installed.

The shelter features a baffled entrance and ventilating system. With a two-foot earth cover, it provides a radiation protection factor of 2,600--persons in the shelter would be exposed to 1/2,600 of the outside radiation. Most modified basement shelters have protection factors of about 100 to 150.

The shelter should be on a well-drained site. In areas with high water tables, it may be built aboveground and covered with at least two feet of earth.

Working drawings for Shelter-Storage Plan No. 5948 are available for 50 cents from the Department of Agricultural Engineering, University of Illinois, Urbana.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Cattle Feeders' Day
Set For April 14

URBANA--Research reports on corn-belt feeding programs for cows and calves, a comprehensive look at roughages for steer rations and an outlook report for feeders highlight the 1964 Illinois Cattle Feeders' Day set for April 14 in Urbana.

The official program begins at 10:00 a.m. in the University of Illinois Stock Pavilion. An open house will be held at the University beef barns both before and after the program.

In discussing corn-belt feeding programs, beef specialist W. W. Albert will report research with cornstalk silage for beef cows, studies with replacement heifer calves and programs for marketing native steers.

J. E. Zimmerman and B. E. Shoemaker will report research comparing feedlot performance and carcass traits of steers fed corn silage and haylage.

Other roughage studies to be reported include research on the effect of heavy fertilizer applications on corn-silage feeding value, the use of the cob portion of ground ear corn as the total roughage source and a comparison of use of 10, 20 and 30 pounds of corn silage in finishing rations.

The cattle feeders' outlook by economist Larry Simerl, a report on how feeding period length and energy levels affect feed requirements and a talk entitled "Is Cattle Feeding in the Corn Belt at the

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Crossroads?" by economist H. F. Breimyer, round out information to be presented during the program. Breimyer is a visiting USDA research professor at the U. of I.

Parking for Cattle Feeders' Day will be available near the southeast corner of the new U. of I. Assembly Hall, where buses will be on hand to take visitors to the Stock Pavilion.

The U. of I. student Hoof and Horn Club will serve a barbecued beef lunch in the Stock Pavilion at noon. Times for the open house at the beef barns are from 8:00 a.m. to 9:45 a.m. and from 3:15 p.m. to 5:00 p.m.

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FOR IMMEDIATE RELEASE

Starter Ration Research Reported at UI Swine Day

URBANA--A group of early-weaned pigs gained as well on a combination of Illinois 16 (a grower ration) and dried skim milk as another group did on a complex starter ration (Illinois 20) in recent University of Illinois tests.

The research was reported at the annual Illinois Swine Growers' Day held this week on the U. of I. campus.

Researcher B. G. Harmon said the grower ration was a simple combination of 67 percent Illinois 16 and 33 percent dried skim milk. Pigs on this ration averaged .52 pound daily gain and ate 1.65 pounds of feed per pound gained. This compared with a .55 pound daily gain and 1.76 pounds of feed per pound gained for pigs on the complex starter ration.

Pigs used in the study were weaned at an average of 20 days and kept on the experiment for 28 days.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Six Scholarships Are Available At U. Of I. For Dairy Technology Study

URBANA--Five $1,000 scholarships will be available for the fall 1964 semester for freshmen in the dairy technology program at the University of Illinois, R. T. Milner, head of the food science department, announced today.

These scholarships are made available by the dairy industry of Illinois.

To be eligible for these scholarships, high school seniors must meet U. of I. College of Agriculture requirements and be at least in the upper half of their graduating class. Applicants will be screened on the basis of extracurricular activities and general character as well as scholastic standing. Students selected for the scholarships will receive $250 a year during their four years in college. All applications must be received at the University by May 1, 1964.

Illinois high school seniors who are interested in studying dairy technology also have an opportunity to compete for a $2,000 scholarship offered by the Chicago Dairy Technology Society. The student selected for this scholarship will receive $500 a year during his four years at the University of Illinois. All applicants for this scholarship will be screened on the basis of scholarship, extracurricular activities and general character. Applications must be received by April 15, 1964.

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Applicants for dairy technology scholarships need not live on a farm.

Milner points out that the University of Illinois is the only institution in Illinois with an accredited curriculum in dairy technology. Dairy technology prepares students for a profession that applies science and engineering to the processing, preservation and distribution of such foods as milk, ice cream, butter and cheese. Graduates from the curriculum find employment in industry, government regulatory agencies and educational institutions.

Students who are interested may obtain applications for dairy technology scholarships from their high school principal or from R. T. Milner, 213 Mumford Hall, University of Illinois, Urbana.

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3/20/64

FOR RELEASE TUESDAY, MARCH 24, 1964

UI Researcher Outlines New Way To Limit Feed For Gestating Gilts

URBANA--One way to limit the feed intake of pregnant sows and gilts is to keep them away from feed.

A plan nearly that simple was outlined today for hog growers attending the 1964 Illinois Swine Day program on the University of Illinois campus.

U. of I. extension specialist G. R. Carlisle explained recent research in which pregnant sows and gilts had free access to self-feeders for 24 out of 72 hours. The feeders contained a fortified corn--soybean meal ration.

"The feeding technique appeared satisfactory for both gilts and sows," Carlisle said. "Gilts given free access to self-feeders one day out of three ate an average of 6.09 pounds of feed per day in one test and 5.4 pounds per day in the other. Both groups performed as well as gilts hand-fed 4.0 pounds daily."

Carlisle noted that sows allowed free access to self-feeders for 24 out of 48 hours ate as much feed as sows on a continuous self-feeding program. The gilts self-fed every other day averaged 9.05 pounds of feed daily, compared with 9.35 pounds daily for gilts continuously self-fed.

Carlisle said that overfeeding is probably the most common problem in feeding sows and gilts. Research has shown that overfat

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females farrow fewer, weaker and smaller pigs than sows in medium condition.

"Self-feeding bulky rations containing high levels of ground corncobs, alfalfa meal and silages will limit sow energy intake with a minimum of labor," Carlisle said. "However, most farmers agree that self-feeding low-energy rations is less economical than hand-feeding a high-energy ration daily, in spite of the greater labor need," he added.

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HDN:cf
3/20/64

FOR IMMEDIATE RELEASE

Bordeaux Mixture Still Controls Fruit Diseases

URBANA--Discovered accidentally 82 years ago, Bordeaux mixture is still one of the best fungicides for controlling fruit diseases, according to University of Illinois plant pathologist Dwight Powell.

A grape grower near Bordeaux, France, daubed his grapevines nearest the road with a mixture of copper sulfate and lime in water to "discourage" passersby from stealing the fruit, Powell relates.

Because Bordeaux is more likely to injure the leaves and fruit than are some of the newer organic fungicides, it should be used only during the dormant season. Adding a dormant oil prevents spring rains from washing the mixture off the plants so rapidly, says Powell.

Bordeaux mixture is always designated on the basis of amounts of copper sulfate and lime to water. For a dormant spray, Powell recommends using an 8-8-100 mixture--8 pounds of copper sulfate, 8 pounds of lime and 100 gallons of water--and adding to it 2 gallons of 2 percent dormant oil. If you're a small-scale backyard fruit grower, use 2 tablespoons of copper sulfate, 6 tablespoons of hydrated lime and 8 tablespoons of dormant oil to each gallon of water.

Powell says you'll improve your "mixing luck" by filling your sprayer with half the required water. Then add and dissolve the correct amount of copper sulfate, next add the hydrated lime and last add the oil. Finally, add the rest of the water and agitate thoroughly.

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Dry lime carbonates over a period of time, so use fresh hydrated lime and keep shaking the sprayer to prevent settling and clogging.

These fruit plants will benefit from a Bordeaux-oil dormant spray:

1. Apples. Helps control black rot and blotch and may lessen the fire blight problem.
2. Pears. May lessen fire blight problem.
3. Peaches. Only means of controlling peach leaf curl.
4. Plums. Effective way to reduce new black rot infections.
5. Brambles (raspberries and blackberries). First prune out all old canes and leave only one-year-old canes. Then apply spray for anthracnose control.
6. Grapes. Helps control dead arm disease.
7. Gooseberries. Helps control the powdery mildew which develops early on new leaves.

Normally you won't need a dormant spray to control diseases on cherries, apricots, strawberries and currants.

A spray is not effective unless properly mixed and thoroughly applied, Powell concludes.

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JJF:cf
3/20/64

FOR RELEASE TUESDAY, MARCH 24, 1964

UI Swine Studies Show Advantage For Pelleted Rations

URBANA--Pelleted rations showed about 10 percent greater feed efficiency than the same rations in meal form in recent University of Illinois swine studies.

The greater feed efficiency with pellets could not be attributed to differences in feed wastage, according to U. of I. extension specialist T. R. Greathouse.

Speaking at the annual U. of I. Swine Growers' Day program, Greathouse pointed out that both pelleting and fine grinding benefited feed efficiency more than rates of gain in growing-finishing pigs.

"Expressed in terms of gain per 1,000 pounds of feed, pelleting produced about 25 more pounds of gain than the meal ration," Greathouse said. "Feeding finely ground corn rather than medium grind was worth an additional five pounds of gain per 1,000 pounds of feed."

Greathouse reported other studies in which pigs fed complete rations in pellet form gained both faster and more efficiently than pigs fed free-choice shelled corn and supplement.

"There was no evidence that pelleted rations increased the number or severity of gastric ulcers," Greathouse explained.

Illinois researchers cannot be certain that all pelleting procedures will yield the same results as shown in the U. of I. tests until research shows more about the influence of variations in pelleting techniques.

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Greathouse referred to earlier U. of I. tests with group-fed pigs weighing 60 pounds or more which showed that rations containing corn ground to medium fineness were at least five percent more efficient than rations containing shelled or cracked corn.

In the same tests, medium-grind corn yielded a minimum of 15 more pounds of gain per 1,000 pounds of feed than the coarser grind.

Past U. of I. studies also have shown finely ground corn to be superior to a medium grind for maximum feed efficiency. However, meal rations containing finely ground corn would not feed down properly in self-feeders.

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HDN:cf
3/20/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Cattle Feeders' Day Set For April 14

Research reports on corn-belt feeding programs for cows and calves, a comprehensive look at roughages for steer rations and an outlook report for feeders highlight the 1964 Illinois Cattle Feeders' Day set for April 14 in Urbana.

The official program begins at 10:00 a.m. in the University of Illinois Stock Pavilion. An open house will be held at the University beef barns both before and after the program.

In discussing corn-belt feeding programs, beef specialist W. W. Albert will report research with cornstalk silage for beef cows, studies with replacement heifer calves and programs for marketing native steers.

J. E. Zimmerman and B. E. Shoemaker will report research comparing feedlot performance and carcass traits of steers fed corn silage and haylage.

Other roughage studies to be reported include research on the effect of heavy fertilizer applications on corn-silage feeding value, the use of the cob portion of ground ear corn as the total roughage source and a comparison of use of 10, 20 and 30 pounds of corn silage in finishing rations.

The cattle feeders' outlook by economist Larry Simerl, a report on how feeding period length and energy levels affect feed requirements and a talk entitled "Is Cattle Feeding in the Corn Belt at the

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Crossroads?" by economist H. F. Breimyer, round out information to be presented during the program. Breimyer is a visiting USDA research professor at the U. of I.

Parking for Cattle Feeders' Day will be available near the southeast corner of the new U. of I. Assembly Hall, where buses will be on hand to take visitors to the Stock Pavilion.

The U. of I. student Hoof and Horn Club will serve a barbecued beef lunch in the Stock Pavilion at noon. Times for the open house at the beef barns are from 8:00 a.m. to 9:45 a.m. and from 3:15 p.m. to 5:00 p.m.

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HDN:cf
3/24/64

FOR RELEASE WEEK OF MARCH 30, 1964

Know Tornado Precautions

Though April showers may bring May flowers, changing spring weather seems to bring on more attacks by those ugly demons, tornadoes.

Tornadoes have already hit in Illinois this year. They will cause more destruction and loss of life during April, May and June than during all the rest of the year.

Knowing what to do if you hear a tornado warning or see a tornado coming may save your life. O. L. Hogsett, University of Illinois safety specialist, offers these tornado life-saving precautions:

1. Take shelter in the southwest corner of your basement, or go into a storm cellar or fallout shelter. If your home doesn't have a basement, take cover under heavy furniture against inside walls on the lowest floor, away from doors and windows.

2. If you have time, open windows on the north and east to reduce damage. This will help equalize the pressure inside the house with the atmospheric pressure outside. Shut off electricity and fuel lines coming into the house.

3. Stay away from windows.

4. If you are in open country when a tornado comes, travel at right angles away from the path of the storm. Since most tornadoes move from the southwest toward the northeast, you should travel toward the northwest or the southeast. If you don't have time to escape, lie flat in a depression in the ground or in a ditch or ravine.

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WDB:cf
3/26/64

FOR RELEASE WEEK OF MARCH 30, 1964

Giant Foxtail Takes A Big "Bite"

If you're "putting up with" giant foxtail, you're contributing to the "foxtail fund," which amounts to $75 million annually in Illinois, says _______________ County Farm Adviser _______________.

University of Illinois tests show that 50 foxtail plants in a foot of row reduced corn yields by 23 bushels per acre and soybean yields by 11 bushels per acre. You just can't afford losses like these, says __________. And, in addition to yield losses, giant foxtail will cost you from $5 to $10 per acre to eradicate once it's established. Since it can produce 20,000 seeds per plant in a year's time, it can take over rapidly.

Rotary hoeing, combined with pre-emergence chemicals and timely cultivation, will go a long way in checking or eliminating this costly pest. If giant foxtail is a problem now in your fencerows or at the ends of fields, it will soon be a problem in your fields. In fencerows and other non-crop areas, use dalapon according to directions.

In cornfields, use a pre-emergence treatment of Atrazine, Randox-T or Randox. In soybeans, use Randox, Amiben or Alanap. In all cases, follow directions to prevent residue problems as well as hazards to your personal safety.

Research shows that safe application rates vary with the soil type. For further information, stop at the County Extension Office. Circular 828, "Controlling Giant Foxtail in Illinois," also gives detailed information.

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JJF:cf
3/26/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Discuss Limited Feeding
At UI Swine Day

URBANA--A University of Illinois swine specialist this week said that limited feeding for finishing swine would be followed in the future when researchers learn how to control it.

"Any feeding practice that can improve feed efficiency by 20 percent and shows a potential of 100 pounds of gain for 280 pounds of feed is bound to hold some promise for the industry," researcher D. E. Becker told a U. of I. Swine Growers' Day audience.

Becker said that management plays an important role in the results of any limited-feeding program. He cited a recent study in which individually fed finishing pigs receiving four pounds of soaked feed daily gained 1.40 pounds a day on 2.86 pounds of feed per pound of gain.

At the same time, group-fed pigs getting the same amount and type of feed gained 1.01 pounds a day and ate 3.98 pounds of feed per pound of gain.

"Apparently, under certain circumstances, group-fed pigs can show a higher level of feed efficiency from a restricted feed intake," Becker said. "It appears that this response is more difficult to get in group feeding programs than with individual feeding."

"However, I don't believe pigs have to be individually fed to get good efficiency from limited feeding," he explained. "Group-fed pigs have done well in U. of I. tests, though not so consistently as pigs that are fed individually."

Becker noted that, at present, researchers do not know which management factors need to be closely controlled under group-feeding conditions to get consistent maximum performance from finishing pigs fed a limited intake of feed.

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HDN:cf
3/27/64

FOR IMMEDIATE RELEASE

Control A Thieving Giant

URBANA--Modern planting practices and fertile Illinois soils have combined forces to raise a giant that's costing farmers in the state $75 million annually.

More than 90 percent of the state's corn farmers hill-drop or drill their corn, so cross-cultivation can no longer control giant foxtail in the rows, says University of Illinois agronomist Ellery Knake.

Few farmers can afford to lose 23 bushels of corn or 11 bushels of soybeans per acre each year. But U. of I. tests show that 50 foxtail plants per foot of row can reduce yields that much, says Knake.

Damage doesn't stop with reduced yields. U. of I. agronomists estimate that it costs $5 to $10 per acre to control this pest, once it's established. It takes over easily if left unchecked, since a single plant may produce more than 20,000 seeds in a year. Some of these seeds may remain in the soil for years. So it's difficult to completely eradicate foxtail once it has a stranglehold. A good control program that prevents the production of new seeds can hold foxtail in check and prevent a complete "take-over."

The most important time to control foxtail is the first few weeks after planting. Use of pre-emergence herbicides, early rotary hoeing and good row cultivation can help to provide early control, advises Knake. Rotary hoeing is effective on foxtail seedlings before they appear on the surface--while they are still in the white--and timely row cultivation will throw soil into the row and cover small foxtail plants, he adds.

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Pre-emergence herbicides attack the young seedlings right after the seeds germinate. Since weeds between the rows are easily controlled by cultivation, it is usually most economical to apply the pre-emergence herbicide just over the rows in a 14-inch band. That's the area that is hardest to reach with the cultivator, Knake points out.

In fields where giant foxtail is primarily at the ends, there is no need to treat the whole field with pre-emergence chemicals. Apply them just at the ends or in other areas where the weed has been bad, Knake advises.

For pre-emergence treatment on corn, use Atrazine or Randox. For soybeans, use Randox, Amiben or Alanap. In fencerows, roadsides, ditch banks and other non-crop areas, use dalapon. For personal safety, and to prevent possible problems, follow label directions explicitly, cautions Knake.

For best results from a foxtail control program, see your county farm adviser. For additional information, ask him for Circular 828, "Controlling Giant Foxtail in Illinois."

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JJF:cf
3/27/64

FOR IMMEDIATE RELEASE

U. of I. Researcher Discusses Slat Spacing For Swine Buildings

URBANA--University of Illinois research with slatted floors shows that slat width and spacing can affect swine performance and cleaning efficiency.

Reporting at the recent U. of I. Swine Growers' Day, researcher A. H. Jensen said pigs gained significantly slower on 1 1/4-inch slats spaced 1 inch apart than on the same slats spaced 1/2 inch apart. The 1-inch spacing was more harmful as the animals grew heavier.

Jensen said the studies with farrowing stall units showed that spacings of 1/2 to 1 inch between slats are wide enough to reduce chances of catching the pigs' feet. A spacing of 3/8 or 7/16 inch is narrow enough to keep the feet of newborn pigs from slipping between the slats.

The U. of I. researcher noted that the 1/2- to 1-inch spaces should be covered at farrowing and for 48 hours afterwards to give small pigs a chance to get used to the floors. Spacing slats at 3/8 or 7/16 inch reduced cleaning efficiency slightly, but the slats didn't have to be covered during farrowing.

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3/27/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Scientist Foresees Fewer Cows,
Higher Production In Dairy Future

URBANA--A University of Illinois dairy scientist has predicted that dairy cow numbers will continue to shrink during the next few years--but probably at a slower rate than in the past two decades.

Dairy specialist K. E. Harshbarger also forecasts a rise in production that could reach a national yearly average of 11,000 pounds per cow by 1976.

"The drastic drop in cow numbers and a corresponding boost in average production per cow have been the most notable aspects of the dairy industry during the past 20 years," Harshbarger said.

"Dairy cow numbers dropped from 25 million in 1945 to only 17 million in 1963. However, during that same period, better efficiency on the part of dairymen has held milk production at a nearly constant level."

Harshbarger said the 1963 national average of 7,500 pounds of milk per cow per year is too low for an efficient dairy operation.

"Illinois DHIA operators are averaging more than 11,000 pounds per cow--primarily because of better management," Harshbarger said. "The entire U. S. dairy industry should reach that potential by 1976 if dairymen make use of present management and disease control knowledge."

Harshbarger said the trend toward fewer but larger dairy herds would persist and that labor efficiency during the milking operation would continue to be a problem.

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"The USDA predicts that, by 1968, 64 percent of U. S. dairy cows will be in herds of 30 or more animals," the U. of I. dairy specialist explained. "If the trend continues at that rate, the figure could reach 90 percent by 1976."

Turning to the labor problem, Harshbarger noted that the question of how to save time and labor in the milking operation is a difficult one.

"We can develop machinery and methods for one man to feed a number of cows at the same time and to clean the barns more efficiently," Harshbarger explained. "But cows have to be handled individually during the milking operation."

Harshbarger noted that today's dairymen could best boost labor efficiency by increasing production per cow.

"A dairyman will make better use of labor in putting the machine on a cow that produces 25 pounds of milk in three minutes than he will by devoting the same time and effort to a cow that produces only 15 pounds per milking," Harshbarger said.

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HDN:je
3/30/64

FOR IMMEDIATE RELEASE

Seven Illinois Farm Youth Selected In IFYE Program

URBANA--Seven Illinois farm youth will represent the United States as "grassroots ambassadors" in foreign countries under the 1964 International Farm Youth Exchange (IFYE) program.

The delegates and the countries they will visit are Ray Ropp, Normal, INDIA; Patricia Mollet, Albion, GERMANY; Suzanne McWhinney, Orion, NEW ZEALAND; Bill Kerchenfaut, Elgin, TURKEY; Frank McCully, Lacon, INDIA; Frederick Wepprecht, Peoria, COLOMBIA; and Gary Coates, Bloomington, ECUADOR.

The young people were selected for their leadership in 4-H and other farm youth activities, explains Hugh Wetzel, IFYE committee chairman at the University of Illinois. They will join more than 100 U. S. IFYE delegates in countries throughout the world.

Wetzel says each delegate will live with at least four farm families during his four- to six-month stay in the host country. In exchange, farm youth from cooperating countries will visit and work on Illinois farms.

Miss Mollet leaves for Germany in April. Kerchenfaut, Coates and Wepprecht will leave for their host countries in June. Ropp, McCully and Miss McWhinney will begin their IFYE experiences in September.

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HDN:je
3/30/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE A.M., APRIL 7, 1964

Ag Bankers Urged To Help Farm Customers Budget

URBANA--Bankers providing credit to farmers should stand ready to help farmers prepare and use farm budgets as a regular part of their lending operations, according to J. M. Holcomb, University of Illinois professor of farm management and finance.

Speaking today at the 18th annual Illinois Bankers Agricultural Credit Conference at the University of Illinois, Holcomb told the bankers that it is their responsibility to encourage farm customers to present budgets, profit and loss records and net worth history to the bank when asking for credit.

He said that farm management ability and the ability to prepare and use farm plans, budgets and records effectively are closely related in today's complex business of farming. Tracing some of the changes that have occurred in farming and in farm family living in the past 20 years, Holcomb pointed out that a farmer may be using four times as much capital in his business today. And, compared with 10 years ago he may be using more than three times as much borrowed capital.

Holcomb listed four kinds of budgets that can be helpful to both the borrower and the lender. They are the partial budget, annual budget and cash flow sheet, projected or long-time budget and family living budget.

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The partial budget is used to help estimate the possible effects of alternative adjustments in the farm business. This budget would help a farmer determine, for example, whether he should buy a combine or hire a custom operator. He would itemize every item of cost and expected return for each alternative method. The partial budget would then show which alternative would be more economical.

The annual budget and cash flow sheet is a projecting device. It helps to show when and from where money comes into the farm business, as well as projecting when, where and for what purpose cash will be needed. An annual budget can also project the profit and loss statement for the coming year and may enable the borrower to avoid losses by changing plans.

The projected or long-time budget, Holcomb explained, is used to project expenses and income for more than one year. It helps to determine repayment capacity for intermediate and long-time credit. This budget also shows how an expected adjustment affects the farm business over a period of several years.

The family living budget should be included in each year's cash flow sheet. Holcomb asserted that family living costs are increasing and are often underestimated by both farmers and lenders. Recent Illinois studies show that family living costs vary from less than $300 per month to more than $700 per month.

One of the best sources of information for setting up farm budgets is records. If records are not available, he said that budgeting could and should be done, and record-keeping should begin at the same time. Then, as the year progresses, the farmer and the lender can compare the budget with actual figures.

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Projecting yields and prices is one of the major problems in budgeting. Budgeters can get help in this area from the farm management manual, which is available from the agricultural economics department at the University of Illinois, Urbana.

In addition to helping prepare and use budgets, Holcomb suggested that bankers establish guidelines to use in analyzing budgets and records. They would include such items as the extent to which farm labor is employed; gross income per man; gross income per acre; returns per $100 feed fed for different livestock; efficiency of livestock production; expenses per tillable acre; and percent of sales remaining for family living and debt retirement.

Holcomb noted that the farm management handbook and the Farm Bureau Farm Management Service annual summary also give sample guidelines. He emphasized that each banker should set up his own guidelines and revise them from year to year.

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FOR IMMEDIATE RELEASE

Four Illinois 4-H'ers To Attend National Conference

URBANA--Four Illinois 4-H Club members have been chosen to represent the state's 75,000 4-H'ers at the National 4-H Conference in Washington, D.C., April 18-24. Selection as a delegate to the conference is the highest honor an Illinois 4-H'er can receive.

The delegates are Mary Steimel, DeKalb; Linda Tolan, Minonk; John Huston, Roseville, and Dale Meyer, Manhattan. They will join 4-H'ers from all parts of the United States at the conference, which has as its theme "Our Heritage--Foundation for the Future."

The conference is planned as an educational experience to give the delegates an opportunity to learn more about important national issues and problems facing American people today, to increase their understanding of democratic values and citizenship responsibilities as adults and to give them a greater appreciation of the nation's capital, its monuments and shrines.

Delegates participate in group discussions, serve on committees, hear selected speakers and develop leadership skills in conducting the conference. During their stay in Washington, the Illinois group will also tour national shrines and government buildings and meet congressional and other national leaders.

One special feature during the conference will be the "4-H Breakfast With Congress." Senator Everett Dirksen and Representative Leslie Arends plan to attend the breakfast as guests of the Illinois delegation.

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Three of the delegates are students at the University of Illinois. Mary Steimel and Linda Tolan are majoring in home economics. Huston is enrolled in vocational agriculture. Meyer is an agricultural student at Joliet Township Junior College, Joliet.

The annual trip to the 4-H National Conference is sponsored by the Illinois 4-H Foundation. Marian Jackson and Hugh Wetzel of the state 4-H staff at the University of Illinois will accompany the group.

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JEW:cf
4/3/64

FOR IMMEDIATE RELEASE

UI Veterinarian Warns Against Misuse Of Iron Injections In Swine

URBANA--A University of Illinois veterinarian has warned that some midwestern swine growers are misusing iron injections developed to prevent and treat iron deficiency anemia in pigs.

Dr. J. R. Pickard said that meat packers in midwestern states have complained to the USDA Meat Inspection Division about consumer rejection of hams stained by injectable iron preparations. The stain occurs when hogs receive iron injections within 30 days of slaughter.

Pickard said the stain cannot be detected at ante-mortem or post-mortem inspections and is only evident to packers when they bone or slice ham. The injected area is unfit for food.

The iron injections are beneficial only to pigs up to several weeks of age, Pickard explained. However, the Food and Drug Administration believes the preparations are being administered to hogs near butcher weight.

Pickard noted that, since misuse of the iron injections can affect the swine producer, meat packer and consumer, farmers should use them only as directed on the label.

The Food and Drug Administration is now requesting all manufacturers and distributors of the injectable iron to carry an additional warning indicating that the material is not to be used within 30 days of slaughter time.

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HDN:cf
4/3/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Recommended Soybean Varieties For 1964

With soybean planting just around the corner, most Illinois farmers are out looking for seed. W. O. Scott, University of Illinois extension agronomist, says that they should check with their county farm advisers to see what varieties are recommended for their area.

Scott says many farmers may be interested in the new varieties that are resistant to phytophthora rot. The disease is found in all parts of the state, and it is a potential threat to soybeans if rainfall is above normal.

These new varieties are Harosoy 63, Hawkeye 63 and Clark 63. They look like and perform the same as the original varieties except that they're resistant to phytophthora rot.

For the extreme northern part of Illinois, Scott recommends Chippewa. This variety is about 10 days earlier than Lindarin and Harosoy. In the northern half of the state, Lindarin, Harosoy, Harosoy 63, Hawkeye and Hawkeye 63 are the recommended varieties. Farther south, Adams, Shelby, Clark and Clark 63 are the recommended varieties. In extreme southern Illinois, Scott recommends Kent, which is about 10 days later than Clark.

Farmers should also be on the alert for low germination results. Because of last fall's dry weather, many beans were cracked in harvest, particularly those raised south of Urbana.

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Over 50 percent of the soybeans tested by the Illinois Crop Improvement Association from the southern third of the state germinated 79 percent or less. In contrast, most of the beans grown in the northern third of the state are germinating above 85 percent. Scott says that farmers can normally expect 90 percent of their soybeans to germinate above 85 percent.

Any farmer who expects to use his own soybeans for seed should have a germination test made. Otherwise, Scott says, he may be faced with the problem of low seed germination.

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JEL:cf
4/7/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE TUESDAY, APRIL 14, 1964

Haylage Superior To Silage In U. Of I. Beef Feeding Tests

URBANA--University of Illinois beef researchers found haylage superior to corn silage for summer feeding in recent trials comparing the two forages.

Steers fed haylage outgained steers fed corn silage by 19.5 percent on a 13.9 percent lower feed cost in test lots receiving a full feed of corn. Carcass grades favored the haylage-fed steers by 1/4 grade.

Researcher J. E. Zimmerman today told a U. of I. Cattle Feeders' Day audience that, during the first 140 days of the trial, rations containing corn silage, corn and soybean meal appeared to be equal to rations containing haylage and corn.

"However, from this time on, or after warm weather set in, the differences became pronounced," Zimmerman explained. "When the data for the entire feeding trial were combined, haylage was definitely superior to a combination of corn silage and soybean meal."

Zimmerman pointed out that the corn silage was stored in a conventional stave silo and that it heated somewhat from day to day after May 1.

Feed costs per 100 pounds of gain averaged $17.05 for the silage-fed calves compared with $14.68 for calves on haylage. Equipment costs were not included in the study.

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The U. of I. researchers also compared silage and haylage for steers limited-fed corn and either corn silage and soybean meal or haylage. The results were equally pronounced.

"Gains were again equal for the first 140 days, but differed significantly by the end of the trial," Zimmerman said. "Haylage-fed steers gained 17.1 percent faster on a 12.2 percent lower feed cost. However, the corn-silage steers graded about 1/4 grade higher, possibly because of a 35-day longer feeding period."

Detailed carcass cutout information after slaughter showed that the two treatments produced carcasses that were similar in most respects. However, carcass grade favored the full-fed haylage group, and the full-fed silage group showed more total retailable product. No other differences were significant.

Zimmerman said that all rations in the feeding test were designed to contain at least 11 percent crude protein, and haylage intake was not allowed to drop below a 10-pound-per-day intake.

The haylage was a first-cutting legume-grass mixture consisting of about 50 percent alfalfa and red clover and about 50 percent orchardgrass.

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HDN:cf
4/10/64

FOR IMMEDIATE RELEASE

Don't Be "Taken" By Fertilizer Quacks

URBANA--About the time farmers start thinking seriously about this year's crop, salesmen offering "miracle" products are "working" the state. It happens every year. Apparently this year is no exception, says University of Illinois agronomist S. R. Aldrich.

Perhaps it's only natural that Illinois has more than its share of "cure-all" peddlers, since the state uses more commercial fertilizers than any other state.

Any time a highly persuasive salesman makes great claims for his product, be on guard, warns Aldrich. Here are some ways to spot the fertility quack:

1. He claims mysterious benefits from "conditioning" the soil and "unlocking" the nutrients already in the soil, often with material from some unusual natural deposit.

2. He makes no guarantee for nitrogen, phosphorus or potassium, so he avoids regulations of the Illinois fertilizer law. Sometimes the benefits he claims are from micronutrients or trace elements. But the micronutrient content is often not guaranteed, so there is no way of knowing whether the nutrients, if present, are available. Usually the analysis shows several elements that are not used at all in plant growth.

3. He has no research results from an unbiased source to back up his claims. He often has testimonials from farmers in other states. Illinois farmers have no way of knowing whether the conditions under which the observations were made would produce reliable results or whether the results would apply to their conditions.

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4. When asked what the county farm adviser thinks of the product, the fertility quack often says, "Don't ask him. He probably wouldn't know the value of our product or recommend it."

5. He often says of agronomists at the University of Illinois, "They won't test our product."

This last claim may be true. A tax-supported institution cannot justify time of staff and use of facilities for projects that offer no potential for the state.

Aldrich makes these suggestions to farmers who are considering the purchase of new and unusual materials for soil treatment:

1. Study the specific claims that are made.

2. Ask about the chemical composition of the material, and specifically about the availability of elements that are claimed.

3. Ask whether the material has been included in research conducted by an unbiased research institution, such as the state agricultural experiment station.

4. Compare the cost of actual plant nutrients in fertilizer materials with the cost of equal nutrients in standard fertilizers.

Aldrich also suggests that farmers look skeptically at some of the "advice" they're getting on limestone and gypsum. Many are being "advised" to apply limestone in amounts up to 15 tons or more per acre and even to apply limestone on soils that are already neutral. There are no theoretical reasons or research results to support these excessive rates of liming. Adding lime to a soil that is already alkaline reduces the available phosphorus and aggravates a manganese deficiency if it exists for soybeans and oats.

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Gypsum has not proved to be a substitute for limestone in Illinois because the problems on acid soils are related to pH--degree of acidity--rather than to the supply of calcium. Gypsum supplies calcium but does not reduce soil acidity.

Gypsum is effective on alkali soils in the arid west because there the problem is excessive sodium. The calcium in gypsum replaces sodium, which can be washed out of the soil, usually by flooding with irrigation water. Sodium is not the problem in alkaline soils in the northern two-thirds of Illinois, Aldrich advises.

By following fertilizer practices based upon research of the University of Illinois agronomy department, Illinois farmers have increased their yields of corn, soybeans, wheat, oats and hay at fantastic rates during the past 25 years. "If you need information or advice on fertility practices, contact your farm adviser and legitimate fertilizer dealers," advises Aldrich. Always seek advice before using an unproven product, he adds.

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FOR RELEASE TUESDAY, APRIL 14, 1964

Deferred Feeding For Spring Calves Vs. Full Feeding Of Fall Calves In U. of I. Tests

URBANA--University of Illinois researchers found no significant performance or profit differences between a normal "deferred" feeding program for spring calves and a full-feeding program for fall calves.

Researcher W. W. Albert discussed the research today at the annual U. of I. Cattle Feeders' Day on the U. of I. campus.

Under the deferred plan, calves dropped in late spring and early summer were fed for 165 days on a full feed of corn silage and protein supplement, and then were full-fed concentrates and limited amounts of hay for the next 127 days.

The fall-dropped calves were worked up to full feed of concentrates and limited hay immediately after weaning. They were kept on the program for 196 days or until researchers felt they had reached the same degree of finish as the deferred-fed calves.

At the end of the study, both groups had reached a low-choice on-foot grade. Average final weight was 995 pounds for the deferred-fed, spring-dropped calves and 872 pounds for the full-fed, fall-dropped calves.

Albert noted that during the full-feeding phase of the study the heavier spring calves gained an average of 2.61 pounds per day to slightly outgain the lighter, freshly weaned fall calves. The fall calves gained 2.52 pounds daily.

However, the fall calves produced gains at a lower feed cost, even though they were fed 69 days longer. Feed costs for 100 pounds of gain were $13.59 for the fall-dropped calves and $15.40 for the spring calves. The fall calves also reached the estimated low-choice grade at a younger age and lighter weight.

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Albert said calves in both lots were valued at $28.00 per hundredweight at the beginning of the study. A daily non-feed cost of 10 cents was used to correct for the varying lengths of the two programs.

Under these conditions the investment per 100 pounds of low-choice, finished steer was $22.00 for the deferred-fed spring calves and $21.80 for the full-fed fall calves.

The spring calves gained 289 pounds on silage and supplement during the winter growing phase of the program. Feed cost was $12.31. Adding the non-feed cost reduced the investment per hundredweight from $28.00 to $23.82 by the end of the growing phase.

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FOR RELEASE TUESDAY, APRIL 14, 1964

UI Beef Specialist Reports Vitamin A Studies At Illinois Cattle Feeders' Day

URBANA--Corn silage grown on heavily fertilized soils showed no harmful effects on beef cattle feedlot performance or vitamin A nutrition in recent University of Illinois tests.

However, as in past tests, U. of I. researchers found that liver vitamin A stores were substantially reduced in the steers eating the silage.

And, as in past studies, the vitamin A depletion occurred in spite of a carotene intake that more than met the daily needs for adequate vitamin A levels.

Beef researcher A. L. Neumann told visitors to the annual U. of I. Cattle Feeders' Day today that scientists cannot explain why heavy fertilizer applications on corn for silage affect vitamin A liver stores in beef cattle.

"Liver reserves in the tests were low enough to cause concern because they made the steers vulnerable to such stresses as high temperatures and infections," Neumann said. "These stresses could raise the vitamin A requirements immediately."

U. of I. researchers link the liver vitamin A depletion with silages containing excessive nitrate. Silages in the tests were grown on highly fertile soils that had been fertilized with nitrogen, phosphorus or potassium, or all three in combination. Steers performed well on all of the silages.

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"The blood plasma vitamin A levels did not differ among lots, nor did they change with time during the 133-day test," Neumann explains.

"However, all liver vitamin A levels decreased significantly with time," Neumann said. "Over two-thirds of the vitamin A reserves were already lost by the time steers had been on feed only 85 days."

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FOR RELEASE TUESDAY, APRIL 14, 1964

UI Research Shows Beef Gains Are Less Efficient As Calves Get Heavier

URBANA--The cattle feeding axiom that animal growth gains are more efficient and therefore less costly than fattening gains was put to the test in recent University of Illinois research--and the results were as expected.

Pounds of feed required per pound of gain rose steadily as the test cattle grew heavier. The four groups of steers used in the study were fed to approximate slaughter weights of 675, 850, 1,025 and 1,200 pounds.

Beef researcher W. W. Albert told farmers about the research at today's annual Illinois Cattle Feeders' Day on the U. of I. campus.

Albert said average initial weight of the steers was 551 pounds. Half of the animals in each group received a complete, high-energy (73 percent TDN) pelleted ration. The other half received a lower energy ration (60 percent TDN). All of the steers received two pounds of grass hay daily.

Feed needed per pound of gain rose from 6.5 pounds for the 675-pound steers on the high-energy ration to 7.71 pounds for 1,200-pound steers receiving this ration.

On the lower energy ration, feed per pound of gain was 8.7, 9.0, 10.0 and 10.4 pounds respectively for the 675-, 850-, 1,025- and 1,200-pound steers.

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FOR RELEASE TUESDAY, APRIL 14, 1964

U. Of I. Researchers Test Cornstalk Silage

URBANA--University of Illinois cattle researchers were sufficiently impressed with cornstalk silage as a cheap wintering ration for dry beef cows in a recent test to give the forage another try.

Speaking today at the annual Illinois Cattle Feeders' Day, U. of I. beef researcher W. W. Albert cited research just completed in which ensiled cornstalks salvaged after combining of high-moisture corn were fed to wintering cows.

Preservatives added to the silage included water, ground corn, dried molasses and a combination of ground corn and dried molasses. Researchers recorded daily feed refusals of two groups of cows fed the silage.

"One lot of cows maintained their weight, while a second lot lost an average of 18 pounds per cow," Albert explained.

Albert pointed out that, while amounts of feed refused varied with preservatives, a management factor at harvesting might have to take part of the blame. Forages from one field had a high dirt content, which undoubtedly caused some of the differences in palatability and consumption.

Silage preserved with corn or molasses had a good aroma. Silage with only water had a yeasty smell.

"The cows refused 25 pounds per head daily of the forage ensiled with water," Albert said. "They refused 4.9 pounds daily of silage preserved with molasses and 9.7 pounds daily of silage preserved with ground corn. Refusals were mostly coarse stalks."

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About 4 1/2 tons of cornstalks were harvested per acre. This meant that, with water added, one acre provided more than nine tons of silage. That's sufficient forage for 365 cow-days.

Albert said U. of I. researchers plan additional studies with cornstalk silage. They believe that improved harvesting methods and finer chopping will assure a more palatable silage.

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FOR RELEASE TUESDAY, APRIL 14, 1964

Discuss Breeding Heifer Feeding At U. Of I. Cattle Feeders' Day

URBANA--Recent University of Illinois research shows that rations that are practical for steer or heifer calves being readied for market are not desirable for replacement heifers.

Speaking today at the annual Illinois Cattle Feeders' Day on the U. of I. campus, beef researcher W. W. Albert pointed out that the principal objectives in a breeding heifer feeding program should be to maximize growth and development at the lowest cost.

"Daily gains of 1.00 to 1.25 pounds are sufficient for maximum skeletal and muscle growth," Albert said. "Any additional gains will only add fat or finish that may actually shrink milk production later in life and thereby lower calf weaning weights."

The U. of I. tests compared three lots of 10 heifer calves. Lot 1 received a ration consisting of corn silage, cracked shelled corn, soybean meal and mixed hay. Lot 2 received the same ration without the shelled corn. Lot 3 received the lot 1 ration without mixed hay.

Heifers in lot 2 gained an average of 1.37 pounds daily compared with gains of 1.95 pounds in lot 1 and 1.71 pounds in lot 3. Daily feed costs were 23 cents for lot 1, 19 cents for lot 2 and 22 cents for lot 3. This meant that the heifers receiving no shelled corn made the most desirable gains at a low daily feed cost.

Albert said the calves in lots 1 and 3 showed more condition or fat at the end of the trial than was either essential or desirable.

"Many purebred breeders feed their heifers more grain than they should in order to have them in attractive condition for the occasional prospective buyer," Albert explained. "The practice may produce more sales, but it is not in the best interest of the heifer."

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Economist Explains Features Of New Wheat Program

URBANA--Features of the 1964 wheat program--the price support loan level, certificate values and acreage diversion payment rates--were announced April 11 by the U. S. Department of Agriculture. Signup to qualify for the new, voluntary program is set for May 1 to 15 in ASCS offices throughout the nation.

Here is how Duane E. Erickson, University of Illinois extension economist in farm management, explains these features of the program:

Price-support loan level. Cooperating wheat producers will be eligible for price-support loans at a national average of $1.30 a bushel on their entire production. The rates will vary by counties and by type of wheat.

Certificate values. In addition to price-support loans, cooperating producers will receive two kinds of negotiable certificates based on the normal production of their eligible acreage planted for harvest. The certificates will have fixed face values. Domestic marketing certificates, covering the producer's share in the national marketing allocation for U. S. food wheat production, will be worth 70 cents a bushel. Export marketing certificates, covering his share of the export marketing allocation, will be worth 25 cents a bushel.

Acreage diversion payment rates. The acreage diversion payment is figured by multiplying 20 percent of the county's wheat loan rate by the farm's normal yield. A wheat grower must divert a minimum

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of 11.11 percent of his wheat allotment and may divert up to 20 percent of his allotment or up to a total of 15 acres, whichever is larger.

To be eligible for a price-support loan, certificates and acreage diversion payments, a farmer voluntarily signs up before May 15 and agrees to produce wheat within his farm wheat allotment and maintain a normal conserving base. He must also produce within the wheat allotment on any other farms in which he has an interest. In addition, he must devote all diverted land to conserving uses.

Erickson pointed out that there are no restrictions on sales of wheat produced in 1964. Regardless of whether or not a farmer agrees to participate in the program, he can sell his entire wheat production to anyone, at any time, and at such prices as he can get.

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FOR IMMEDIATE RELEASE

State FFA Public Speaking Contest May 1 At Urbana

URBANA--The top 20 district FFA public speakers will compete in state public speaking contests Friday, May 1, at the University of Illinois. The contests include the finals of the State FFA extemporaneous Public Speaking Contest and semi-finals of the State FFA Prepared Public Speaking Contest.

First-, second- and third-place winners will be chosen in finals of the extemporaneous contest from competition among the first- and second-place winners from each of the five districts of the state.

In the prepared public speaking contest, judges will pick three finalists from competition among the two winners from each of the five districts in the state. The three finalists will compete in the state finals on June 10 at the state FFA convention in the University of Illinois Assembly Hall.

Awards and plaques will be presented to the winners of the contests during the state FFA convention. The Illinois FFA Foundation will provide the awards.

In addition, the winner of the state prepared public speaking contest can compete in the regional contest this fall. Winners of the regional contest vie for top national honors during the national FFA convention at Kansas City, Missouri, in October.

FFA public speaking contests supplement the planned educational programs of more than 16,000 students of vocational agriculture in 441 Illinois high schools.

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NEWS FROM AGRICULTURE
NIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

University of Illinois To Host
Regional Farm Management Workshop
April 28-30

URBANA--More than 70 farm management extension specialists from 13 midwestern states and from all other sections of the country will convene at the University of Illinois April 28-30 to explore farm management educational techniques for the 1970s.

The three-day North Central Farm Management Workshop at the Illini Union building will feature new educational developments. Among them are:

Programmed learning and use of teaching machines.

Simplified methods of linear programming--a way to use mathematics in farm management planning.

Current and future role of electronic data processing of farm records in farm management.

Some participants will play a farm management "game," using an IBM computer. Players are required to make decisions for a typical farm on the allocation of land, selection of crops and livestock, purchase and sale of produce and use of capital. These decisions are fed into the computer, and it delivers the results of a full year's farm operation in about one minute.

The workshop is sponsored by the cooperative extension services of the 13 midwestern states, the Federal Extension Service and the Farm Foundation. Extension specialists taking part in the program will come from Ohio, Michigan, Illinois, Indiana, Wisconsin, Kansas, Minnesota, North Dakota, South Dakota, Missouri, Kentucky, Iowa and Oklahoma.

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FOR IMMEDIATE RELEASE

Illinois Feeder Pig Import Law Tightened

URBANA--Stiffer laws now control the movement of out-of-state feeder pigs into Illinois. Like similar laws in other states, Illinois regulations are aimed at controlling contagious swine diseases.

Persons shipping feeder pigs into Illinois must get a permit from the Illinois Department of Agriculture. Obtaining a permit requires meeting one of these three vaccination conditions:

(1) Pigs must have been vaccinated with anti-hog-cholera serum and modified live virus hog cholera vaccine more than 21 days before entering Illinois.

Or (2) pigs can be vaccinated when loaded for shipping or within 24 hours before entering Illinois and held in quarantine at the destination for at least 21 days.

Or (3) unvaccinated pigs must be vaccinated within 48 days after entering Illinois and quarantined at the destination for 21 days.

In addition, a veterinarian must issue a health certificate showing that the pigs are free from signs of contagious disease, are not from a quarantined area, have not been fed raw garbage, are not infected with nor have been exposed to vesicular exanthema and have been vaccinated as required by law. The veterinarian is also required to ear-tag each pig and record the numbers on the health certificate.

These regulations apply to feeder pigs brought into Illinois from all sources. However, pigs from out-of-state public stockyards must meet an additional requirement--they must be quarantined for 21 days after arrival. At the end of the quarantine period, the owner is required to report their condition to the Division of Livestock Industry.

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This law does not apply to swine brought into Illinois for immediate slaughter if they are accompanied by a proper consignment slip.

The minimum fine for violating the law is $100 for the first offense, $200 to $500 for the second offense and $200 to $500 plus 60 days in jail for the third offense.

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FOR IMMEDIATE RELEASE

Built-In Costs Obligate Cattle Feeders To Keep Feeding, Says Economist

URBANA--A University of Illinois economist says the huge investment in cattle feeding machinery and facilities is creating tremendous pressure to keep feeding operations going at full tilt--even in a period of falling prices.

Speaking at the annual U. of I. Cattle Feeders' Day here, visiting USDA economist Harold Breimyer said that commercial feedlots have virtually industrialized cattle feeding, changing it from a sideline enterprise to a specialty.

"And now corn-belt farmer feeding has followed suit," Breimyer added. "Many Illinois farmers now have more dollars tied up per animal than commercial feeders do. Therefore, they too try to keep the feeding operation going, almost irrespective of all else."

Breimyer said that the present overexpansion of feeding facilities reduces profits by forcing each feeder to bid more vigorously for replacement cattle than he would if it were easier for him to sit out a season.

"Many old-time feeders looked down their noses at the in-and-outer," Breimyer said. "However, it was the in-and-outer who long brought stability to feeding. He was an unsung hero of the feeding industry. Probably the cattle-feeding business needs nothing so much right now as it needs some outers."

The USDA economist said that the next few years would probably pit corn-belt feeders against western commercial feeders more sharply than before. He believes the survival power of corn-belt farmer feeding may depend as much, or more, on ability to improve marketing methods as on skill in putting on gain.

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"From everywhere come signs that the entire marketing and distribution system is getting impatient with taking whatever kind and number of cattle the feeding business sees fit to make available."

Breimyer said the quality and overfat problem "absolutely must be solved if the corn-belt feeder is to compete successfully." He called the resistance to adding cuttability scores in beef grade standards "terribly shortsighted."

Turning to beef imports, Breimyer said that cutting off imports would not restore profits to cattle feeding, because the lower profits were due to other causes--primarily overexpansion.

"Most of the advertised causes of trouble in cattle feeding point the finger outside the industry," he said. "This is normal human psychology, but it is bad economics."

"Imported beef is mostly processing beef that we produce only as a byproduct," Breimyer said. "It comes in because our market for that kind of beef keeps growing, but the supply is declining. We simply are no longer primary producers of processing beef."

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FOR IMMEDIATE RELEASE

Researchers Probe Tomato Secrets

URBANA--Such sophisticated devices as an infra-red analyzer and a vacuum-immersion tester give a push-button boost to tomato research in the University of Illinois' horticulture department. But some problems--like "blotchy ripening"--still call for the "do-it-yourself" approach used by two U. of I. researchers. The result is a makeshift "stem chiller" (see photo).

Researchers S. A. Garrison and J. P. McCollum are trying to reproduce "blotchy ripening" artificially and consistently. This malady is becoming increasingly severe in tomato fields. Solving the problem would be worth millions of dollars to the industry, says McCollum.

Fertilizers have played a major part in higher tomato yields. But as tomatoes are forced in this way, blotchy ripening has become more severe. The disease shows up most commonly in early tomatoes and those raised in greenhouses. Cloudy weather, lush foliage, fruit low on the vine and low carbohydrate content seem to play important roles in blotchy ripening. With their "stem chiller," McCollum and Garrison are trying to reproduce the symptoms under a controlled environment. Once they perfect the technique, they can study what is happening, screen various plants for resistance and introduce them into a breeding program. After causes of the disease are pinpointed, changes in fertility recommendations and other cultural practices may be in order, says McCollum.

The infra-red analyzer gives scientists an almost instant "fingerprint" of a tomato's ability to withstand bruising (see photo). If bruised when green, a tomato might heal. But bruising during

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ripening is a different story. Many of the mysteries of fruit ripening remain locked. And since about 80 percent of the fresh tomatoes now sold hit the weekend market--and few growers have facilities for holding for a specific market--learning more about how to slow the ripening process would help both the producer and the consumer, says McCollum.

Another U. of I. researcher, A. E. Thompson, uses genetics to improve tomato quality. As mechanical pickers become more commonplace, quality control becomes more critical. Some of the major work at the U. of I. centers around color, acidity, firmness, crack-resistance and solids content.

Processors would like to have tomatoes that color uniformly and early in relation to the other ripening processes. And processors and backyard gardeners alike want a deep crimson color. Thompson is working with tomato lines that originated in Canada to increase the ratio of red to yellow carotenoid pigments. Tomato coloring depends on the total amount of these pigments as well as their ratio. Researchers could get redder tomatoes by lowering the amount of carotene, but they don't want to do so because carotene is necessary for vitamin A formation.

Acidity regulates the flavor and also prevents spoilage if the acid content is high enough. Certain bacteria that cause spoilage in low-acid tomatoes would be killed if they were heated for a long enough time at high temperatures, but the result would be poor color and low quality. Here's where high acidity pays off.

Much of the 50 percent increase in yields in the past 10 years is due to improved crack resistance, says Thompson. Much work still remains to be done in this area, he adds. Regulatory agencies take a

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dim view of cracked tomatoes because of molds and fruit-fly contamination. Resistance to field-cracking as well as fruit firmness go hand in hand in the handling of tomatoes, says Thompson. Illinois tomato growers, now averaging 14 tons per acre, could double their yield with the right crack and disease-resistant variety. The state ranks sixth in production for processing with a crop valued at $4.5 million.

In research on crack resistance, U. of I. researchers developed and use the vacuum-immersion tester (see photo) to simulate field conditions under controlled environment. This technique not only eliminates usual environmental fluctuations, but speeds up research considerably.

The solids content of tomatoes is important in determining the yield of processed tomato products--pastes and purées--says Thompson. Some small-fruited tomatoes now under study contain two percent more solids than the average tomato. Such "high-solids" types may be worked into the breeding program to boost solids content.

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NEWS FROM AGRICULTURE

NIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE WEDNESDAY P.M.,
APRIL 29, 1964

Computers Invade Farming

URBANA--More than 70 farm management extension specialists from all over the United States today ran a typical farm by using an IBM 1620 computer. It was part of a new computer-based farm management game demonstrated here during the three-day North Central Association Farm Management Workshop at the University of Illinois. This method is being explored for possible use in teaching farm management principles.

Players in the game made decisions for a typical farm operation--allocation of land, selection of crops and livestock, purchase and sale of produce and use of capital. These decisions were fed into the computer, and it delivered the results of a full year's operation... in one minute. Participants studied the effect of their decisions and, on the basis of these results, made new decisions for the next period and so on.

The game can take into consideration six different crop enterprises: corn, oats, wheat, soybeans, pasture and alfalfa. These crops can be grown on four different types of soil. It also provides for nine different types of livestock operations.

The developer of the computer farm management game, L. M. Eisgruber, professor of agricultural economics at Purdue University, said it is based on farm management research, historic price movements and trends in yields, as well as personal observation. He explained that it sets up a mathematical model duplicating the modern American farm with its complex economic interrelationships.

Computers can also be used in linear programming, which is a method of planning to increase farm profits. This method would indicate when to shift crops and invest capital; determine least-cost rations for beef cattle; schedule use of farm equipment; and improve farm record-keeping.

The workshop is sponsored by the cooperative extension services of 14 midwestern states, the Federal Extension Service and the Farm Foundation. Most of the extension specialists taking part in the program are from Ohio, Michigan, Indiana, Kentucky, Illinois, Wisconsin, Minnesota, North Dakota, South Dakota, Nebraska, Iowa, Missouri, Kansas and Oklahoma. Robert Schwart, University of Illinois extension economist in farm management, is in charge of local arrangements for the program.

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FOR IMMEDIATE RELEASE

Good Opportunities For Farm Recreation Enterprises

URBANA--Many farmers could cash in on farm recreation if they would develop tourist and recreational facilities for this specialized market, reports E. L. Sauer, University of Illinois extension specialist in rural areas development.

Sauer points to the growing need for farm-based recreational facilities near the eight metropolitan areas in Illinois--Chicago, Rockford, Peoria, Rock Island-Moline, St. Louis, Springfield, Champaign-Urbana and Decatur. Each of these areas has a population of more than 50,000.

Nearly four out of five persons in Illinois live in one of the eight metropolitan areas. Sauer explains that the need for recreational facilities near these areas could be met by farmers' diverting land from present uses to recreational uses.

Here is where farmers' opportunities come in: They could provide many recreational enterprises in rural areas, such as vacation farms, camps and campgrounds, picnic areas and facilities for horseback riding, swimming, boating, fishing, hunting, winter sports and nature study. Providing these facilities could add extra income to farm operations. Or the farm could become an entirely recreational business.

Why don't farmers operate more recreational businesses? Sauer says it is mainly because many farmers may lack the experience and know-how to start such enterprises or to carry them out. He asserts that, like other farm businesses, farm recreation requires study, technical guidance, patience and follow-through.

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Liking and understanding people is basic to success in farm recreation enterprises. Sound management is also important to success. Sauer reports that farmers who begin on a small scale, gain experience and gradually enlarge their recreational businesses are usually more successful than those who start on a large scale.

Sauer suggests that farmers interested in starting a recreational business on their farms contact their county farm adviser for sources of help.

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FOR IMMEDIATE RELEASE

New-Type Blades Can Make Lawn Mowing Safer

URBANA--Using one of the newly designed safety blades on your rotary power lawn mower could save you or a member of your family from serious injury, says Ordie Hogsett, University of Illinois extension safety specialist.

Hogsett points out that power lawn mowers cause an estimated 80,000 accidents a year. Lawn-mower accidents happen mainly in two ways: hands or feet get under the running mower, causing severe lacerations or amputated fingers, toes or worse; and the rapidly revolving tips of the old-style straight steel blades, which may be traveling at more than 180 miles per hour, throw objects like rocks and sticks from underneath the mower with terrific force.

The new safety blades are designed to reduce injuries by eliminating severe lacerations or amputations and by not ejecting objects from underneath the mower. Various types of new blades on the market include a rubber blade, an S-shaped blade that usually will not eject objects, a disc blade and others.

Hogsett advises these precautions when using power mowers, regardless of the type of blade you are using:

1. Pick up rocks, sticks, glass and other objects before mowing.
2. Keep children out of the mowing area.
3. Never go barefoot or wear sandals when mowing--wear heavy leather shoes.
4. Never walk backwards pulling the running mower.
5. Be extra careful when mowing steep banks, hillsides and terraces.

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FOR IMMEDIATE RELEASE

Irradiated Food Result Of 15-Year Research

URBANA--The Federal Food and Drug Administration's recent approval of irradiated wheat and bacon for human consumption is the culmination of 15 years of scientific research, according to Dr. Elwood Reber, physiologist, University of Illinois College of Veterinary Medicine.

Having studied the use of radiation in food preservation since 1951, Dr. Reber is presently testing irradiated clams. During the next two years, he will feed 48,900 pounds of irradiated clams to a minimum of 320 rats, 120 chickens and 24 dogs. Constant testing will determine any possible toxic and nutritional effects on body organs, growth and reproduction.

"U. S. research on irradiated food is so intensive that several foreign countries have been selling irradiated potatoes and wheat on the basis of our research," Dr. Reber said. Nearly all 24 classes of food have been tested, and test results will soon be presented to the FDA for approval.

An exhibit comparing irradiated and non-irradiated food will be presented at the third annual UI Veterinary Medical Open House featuring actual surgery, demonstrations and exhibits May 8-9 in Urbana.

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FOR IMMEDIATE RELEASE

UI Using New Rabies Test

URBANA--A new rabies diagnostic test that is faster and more reliable than other tests is presently being used at the University of Illinois College of Veterinary Medicine, according to Dr. Neil Becker, UI veterinarian.

The Fluorescent Antibody Test consists of a mixture of purified antibody solution and fluorescent dye. When this special solution contacts brain tissue from a rabid animal and is exposed to ultraviolet rays under a microscope, the dye turns yellow-green.

"This test is easy to read and is 95 to 99 percent accurate as compared with the 80 percent accuracy of the old test," Dr. Becker said.

The Fluorescent Antibody Test will be demonstrated at the third annual UI Veterinary Medical Open House featuring actual surgery, exhibits and demonstrations May 8-9 in Urbana.

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NEWS FROM AGRICULTURE
NIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Economist Answers Questions About The 1964 Wheat Program

EDITOR'S NOTE: The following questions and answers present the general provisions of the 1964 Wheat Program, according to Duane E. Erickson, University of Illinois extension economist in farm management. Farmers who have further questions about the program should contact their farm adviser or ASC office.

WHY IS KNOWLEDGE OF THE 1964 WHEAT PROGRAM AND ITS PROVISIONS IMPORTANT TO ILLINOIS FARMERS?

Illinois farmers produced wheat worth about $106,000,000 in 1962, making this the third most important crop in the state. According to ASC definitions, 133,035 wheat farms in Illinois have established allotments of 1,701,103 acres. Of this number of farms, 27,960 grow more than 15 acres of wheat, and 105,075 have less than 15 acres.

HAS THE WHEAT FARM ACREAGE ALLOTMENT CHANGED SINCE THE SPRING OF 1963?

No. The basic farm acreage allotment under the law is the same. Farmers were notified of their allotment in the spring of 1963.

WHAT IS THE FARM MARKETING ALLOCATION?

The farm marketing allocation is 90 percent of the normal production of the acreage allotment. Domestic and export marketing certificates will be issued on this allocation.

WHAT ARE THE FARM'S NORMAL YIELDS FOR 1964?

They are the same as were given in the 1964 wheat allotment notification sent to farmers in the spring of 1963. The normal yields are used in figuring the amount of certificates that will be issued to individual farmers.

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HOW IMPORTANT IS MINIMUM DIVERSION UNDER THIS PROGRAM?

It is an essential feature of the program. The smallest acreage that can be diverted from wheat and devoted to conservation uses is 11.11 percent of the farm wheat allotment.

CAN ADDITIONAL ACREAGE BE DIVERTED ABOVE THE MINIMUM 11.11 PERCENT?

A producer may decide to divert up to 20 percent of his wheat allotment, or up to a total of 15 acres, whichever is larger. If the farm wheat allotment is 13.5 acres or less, the maximum additional diversion is equal to the allotment.

HOW IS THE DIVERSION RATE FIGURED?

The rate of diversion payment is uniform for each participating farm. The rate per acre is figured by multiplying one-fifth of the county price-support loan rate by the normal yield for the farm. For example, if the county loan rate is $1.38 and the farm's normal yield is 30 bushels per acre, the diversion rate will be $8.28 per acre.

WHAT IS THE PRICE-SUPPORT LEVEL FOR ILLINOIS?

Although the state average price-support loan rate for wheat produced in 1964 is $1.38, the rate will vary from county to county and by classes of wheat. Price-support loans will be available for all wheat produced on participating farms, whether stored on the farm or in a warehouse off the farm.

WHAT ARE THE REQUIREMENTS FOR PRICE SUPPORT?

A wheat grower must sign up and fulfill the following conditions:

1. Produce wheat within his allotment.
2. Produce wheat within the allotment on any other farm in which he has an interest.

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3. Devote at least 11.11 percent of his wheat allotment acres to approved conserving uses.
4. Maintain a normal conservation farm base for his farm.

WHAT TYPES OF MARKETING CERTIFICATES WILL BE ISSUED?

Two kinds of certificates will be issued. Domestic marketing certificates will be worth 70 cents a bushel, and export marketing certificates will be worth 25 cents a bushel.

HOW IS THE NUMBER OF BUSHELS UNDER DOMESTIC CERTIFICATES DETERMINED?

For 1964 the domestic marketing allocation is half of the farm marketing allocation--or 45 percent of the farm allotment's normal production. Under various levels of diversion, the amount of domestic marketing certificates issued to an eligible farmer will be the smaller of:

1. The normal production of the allotment multiplied by the domestic allocation percentage, or
2. The wheat acreage on the farm multiplied by the farm normal yield.

HOW IS THE NUMBER OF EXPORT CERTIFICATES DETERMINED?

The export marketing allocation is half of the farm marketing allocation--or 45 percent of the farm allotment's normal production. The amount of export certificates under various levels of diversion will be the smaller of:

1. The normal production of the allotment multiplied by the export certificate percentage; or,
2. The wheat acreage on the farm multiplied by the farm's normal yield less the amount of domestic certificates issued.

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HOW DOES A WHEAT PRODUCER QUALIFY FOR CERTIFICATES?

A wheat producer must sign up and comply with the provisions of the program.

DOES NONCERTIFICATE WHEAT RECEIVE PRICE SUPPORT?

Noncertificate wheat, that is, wheat produced above the amount covered by domestic and export certificates is eligible for a price-support loan based on a state average of $1.38 a bushel.

WHAT HAPPENS IF ALL THE LAND SIGNED UP FOR DIVERSION IS NOT DIVERTED?

Farmers who sign up but fail to divert as many acres as they intended will not receive the diversion payment. If a farmer carries out the minimum diversion and complies with the other provisions of the program, he will be eligible for certificates and price support loans on all of his wheat.

DO WHEAT FARMERS RECEIVE CERTIFICATES IF A CROP FAILURE OCCURS?

Certificates will be issued on the basis of the acres planted for harvest times the farm's normal yield, not on the amount of wheat actually harvested in 1964. If a partial or total crop failure occurs, certificates will be issued. They can be redeemed for cash at the ASCS county office.

CAN A FARMER WHO DID NOT PARTICIPATE IN THE FEED GRAIN PROGRAM PARTICIPATE IN THE WHEAT PROGRAM?

Yes. Cross compliance is not necessary.

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NO
4/23/64

NEWS FROM AGRICULTURE
NIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Veterinary Open House May 8-9

The third annual University of Illinois Veterinary Medicine Open House will take place May 8 and 9, according to student co-chairmen John Sagartz, 5937 N. Medina Ave., Chicago, and William Kerr, New Salem.

Actual surgery, demonstrations and exhibits will highlight the event, scheduled for 1 to 9 p.m. Friday and 9 a.m. to 5 p.m. Saturday. Purposes of the open house are to show the public the vast areas of science in which veterinary medicine is involve, to describe career opportunities and educational requirements of veterinary medicine, and to show research in progress at the college.

Surgical demonstrations will depend on surgical needs of "patients" at the UI large and small animal clinics, but veterinarians are expecting to perform a Caesarean section, tumor removal, spay, fracture repair and rumenotomy (an operation to remove nails and other metal objects commonly swallowed by livestock).

Highlighting the exhibits will be one giving a detailed explanation of PROJECT SIZON, a unique research project in southern Illinois on zoonoses--diseases transmitted from animal to man or man to animal. Veterinarians, physicians, biologists, zoologists, bacteriologists and many other scientists are combining their knowledge in an effort to find out why a disease recedes and lies dormant--sometimes for years--and then suddenly emerges to become an epidemic.

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Other highlights include exhibits and demonstrations on the role of blood in preventing infection; viruses and how they cause disease; body effects caused by improperly used drugs; development of the chicken embryo; brucellosis ring test for Illinois dairy herds; digestion in the cow; tips on caring for pets; preventing disease in livestock; new medical electronic equipment; the recently developed rabies diagnostic test, and many others. Also, an information booth will be set up to answer high school students' questions regarding college.

Other events on campus May 8 and 9 include the Junior Academy of Science Fair.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

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Other events on campus May 8 and 9 include the Junior Academy of Science Fair.

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4/30/64
NO

FOR IMMEDIATE RELEASE

Farm Workers Are Not Covered By Wage-Hour Laws

URBANA--Farm workers are generally exempt from the minimum wage and overtime pay provisions of the Federal Wage-Hour Law. And children are exempt from the child-labor provisions of the act if they are employed in agriculture under certain conditions, according to Norman Krausz, University of Illinois professor of agricultural law.

The Federal Wage-Hour Law sets up minimum and overtime wages. However, farm workers are not covered by this law if they're working in production phases of agriculture. Such work includes cultivating the soil, growing or harvesting crops or raising livestock, bees, fur-bearing animals and poultry. People working in greenhouses, nurseries and hatcheries are also exempt from the law.

Certain workers in the "area of production" are exempt from the law if they handle, pack, store, pasteurize, dry, prepare in the raw or natural state or can agricultural or horticultural commodities for market, or make cheese, butter or other dairy products. The area of production means that the place of work is in open country or in a community of less than 2,500 population and that it receives its raw materials from within certain distances. For example, the area of production distance limit for fresh fruits and vegetables is 15 miles.

Most part-time and seasonal farm workers are also exempt from minimum wage and overtime standards.

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Krausz points out that, under federal law, children may be employed in agricultural work during hours when school is not in session. Children under 16 may work in agriculture for their parents or guardians during any hours.

However, state laws generally supersede this federal child-labor law exemption. Krausz explains that Illinois law requires attendance in school until age 16. Thus a parent or guardian would violate state compulsory school attendance laws by employing his child during school hours.

For additional information on the Federal Wage-Hour Law and child-labor provisions of the Fair Labor Standards Act, contact the Chicago or Springfield field office of the Wage and Hour and Public Contracts Division of the U. S. Department of Labor.

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WDB:tf
5/1/64
NO

FOR IMMEDIATE RELEASE

Scientists Refine "Fingerprinting" Of Defiant Clay Minerals

URBANA--Magnetophoresis, electrophoresis, X-ray diffraction, X-ray spectrography, differential thermal analysis, density gradients--such space-age-sounding terms might lead the casual observer to believe a moon shot was near. But all this scientific "gear" will help two University of Illinois researchers separate and "fingerprint" or identify clay minerals that form complex mixtures in soils and that to date have defied simple isolation techniques.

A $38,000 National Science Foundation grant will enable U. of I. agronomists A. H. Beavers and R. L. Jones to refine present methods of characterizing soil clays. To date most studies of soil clays have treated their properties and reactions as average values reflecting the several different kinds of minerals that are present. By separating clay minerals and studying their individual properties, Beavers and Jones hope to pinpoint the different clay-size components for such things as phosphorus- and potassium-fixing properties.

Clay minerals have a net negative charge. How strongly they attract, hold and release and to what extent they trap nutrient elements depends more on the location of this charge within the clay mineral than on the amount of charge. If the charge is located near the surface of the mineral, there is strong attraction for positively charged plant nutrients. These surface charges can cause the plate-shaped clays to close like a clamshell, tying up or fixing plant nutrients. Beavers and Jones are looking for the ultimate reaction that will liberate valuable nutrients that have been hopelessly tied up by clays.

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Researchers have found clay just as "sticky" to work with in the laboratory as has the farmer who tries to work it in the field. Clay has been studied for centuries but it has doggedly resisted the refined investigation of the type Beavers and Jones contemplate. Refinement of clay separation and isolation methods would have widespread use not only in soil fertility, but also in ceramics, geology and related allied fields.

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JJF:cf
5/1/64

FOR RELEASE MAY 1, 1964, OR AFTER

Prevent Insect Invasion With Foundation Sprays

URBANA--If you have "put up with" an annual invasion of insects--ants, crickets, centipedes and millipedes, spiders and "waterbugs" or oriental cockroaches--you'll be happy to know you can now control them safely, before they enter your house--with foundation sprays.

To successfully repel these common insect pests, make a complete foundation spray barrier around your house, using either dieldrin or chlordane, advises University of Illinois entomologist H. B. Petty, Cooperative Extension Service and Illinois Natural History Survey.

Use this five-step process to prepare a foundation spray:

1. Buy an emulsifiable concentrate of either chlordane or dieldrin. Dilute with water. Use a 2 percent chlordane or 1/2 percent dieldrin solution. The average house requires about 3 gallons of finished spray, so you'll need 12 ounces--3/4 pint--of 16 percent dieldrin or 1 pint of 45 percent chlordane concentrate in 3 gallons of water.

2. Spray the foundation just to the point of run-off (see photo). Spray all around the house.

3. Spray a 2- to 4-inch band of soil alongside the foundation.

4. Spray the cracks and crevices in concrete slabs abutting the foundation, and cracks and crevices in the foundation.

5. Spray behind the concrete steps and beneath porches and other structures that abut the foundation. To be effective, the barrier must be complete. Force the insect to cross the barrier; then you've "got him."

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Make one application now and one late this summer--in August or early September. Insects are looking for food now. This fall they'll be looking for protection. Either way they're a nuisance.

A foundation spray should make your home safer--you won't be resorting to baits or sprays that curious children might "taste-test"--and it should keep your home reasonably free of frequent invaders.

But don't lose the safety advantage of foundation sprays, Petty cautions. Follow these precautions:

1. Spray carefully; don't use more spray than you need.
2. Wear rubber or plastic gloves when mixing concentrates and spraying.
3. Wash with soap and water after using pesticides.
4. Don't smoke while working with pesticides.
5. Don't apply foundation sprays if a dug well or cistern is near the foundation.
6. Store pesticides out of reach of children and irresponsible people.

Your county farm adviser has detailed precautions on the safe use of pesticides and other information that will help you battle these annual insect invaders.

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JJF:cf
5/1/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

New UI Leaflet Answers Questions Often Asked By Swine Producers

URBANA--Following are answers to some of the questions most often asked of University of Illinois swine specialists.

Answers to other questions commonly asked by Illinois swine producers appear in the new U. of I. leaflet, "Your 1964 Hog Business Management Suggestions." You can get a copy of this leaflet from your farm adviser or from the U. of I. Department of Animal Science.

DO I NEED A MIXTURE OF ANIMAL AND PLANT PROTEINS IN MY PROTEIN SUPPLEMENT?

No. Several years' work at the University of Illinois has shown that the protein in soybean meal will produce as fast and efficient gains as a mixture of proteins from several sources. Soybean meal has some deficiencies, other than quality of protein, that must be corrected before it will satisfactorily supplement corn in hog rations.

WHAT ARE THE DEFICIENCIES IN SOYBEAN MEAL AS A PROTEIN SUPPLEMENT FOR HOGS?

Soybean meal is deficient in the B-vitamins, vitamin A and minerals. In addition, it is too palatable to feed free choice. If these deficiencies are corrected, soybean meal is an excellent protein supplement for hogs.

DO I NEED ALFALFA MEAL IN MY HOG DRYLOT RATIONS?

If you can buy synthetic B-vitamins and vitamin A premixes, you do not need to have alfalfa meal in drylot rations. Although alfalfa meal is a good source of these vitamins, it is usually more expensive than the synthetic sources. Also, the fiber in alfalfa meal may tend to slow down gains.

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ARE ANTIBIOTICS NECESSARY IN BROOD-SOW RATIONS?

We formerly thought antibiotics were useful only in controlling a specific disease. However, in five of seven trials at the University of Missouri and Iowa State University, apparently healthy sows that were fed an antibiotic farrowed and raised an average of 1.75 more pigs per litter than the sows that didn't get the anitbiotic. The test sows received 1/2 gram (500 milligrams) of antibiotic per head daily for two weeks, beginning three or four days before the start of the breeding season.

I'VE READ THAT A PRODUCT CALLED nf-180 WILL CONTROL SCOURS IN PIGS WHEN IT IS FED TO THE SOW. DOES IT WORK?

This product has seemed to work very well in some cases, but not too well in others. One disadvantage is that it adds about $18 to the cost of a ton of complete ration. If scours in baby pigs is a persistent problem in your herd, you might try this material.

WHAT PROGRESS HAVE WE MADE IN IMPROVING CARCASSES OF ILLINOIS HOGS?

The results of the carcass contest at the Illinois State Fair show that the 1956 champion carcass would have placed 82nd in 1963. In a series of farmer barrow shows in the spring of 1963, the average of 335 hogs shown had a larger loin eye and almost as high a percentage of lean cuts as the 1956 champion.

WHAT IS THE VALUE OF OATS IN HOG RATIONS?

Oats are particularly good in the rations of bred sows and may replace all of the grain in these rations. For growing pigs and nursing sows, oats work best if they do not make up over one-third of the grain fed. They should be finely ground. Grinding will increase their value by 30 percent. Oats should not replace corn unless they are cheaper, pound for pound.

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CAN I USE SILAGE IN MY BROOD-SOW RATIONS?

Research at several midwest experiment stations indicates that either corn or legume silage can help to reduce feed costs of pregnant sows. But more labor will probably be required than for dry feed.

Feed all the corn silage the sows will clean up, plus 1.5 pounds of drylot supplement and one pound of corn per head daily. Feed all the legume silage sows will eat, plus one pound of corn for every three pounds of silage plus one-half pound of drylot supplement per sow daily. Sows can be expected to eat as much as 10 to 12 pounds of total feed (silage and concentrates) per head daily.

WHAT IS THE VALUE OF HIGH-MOISTURE CORN AS A HOG FEED?

On a dry-matter basis, high-moisture corn, preserved in an air-tight silo, seems to be about equal to regular-moisture corn. Gains are about the same. The high-moisture corn is quite palatable, but the extra moisture tends to limit dry-matter intake.

IS THE THERE ANY ADVANTAGE IN FEEDING GROWING-FINISHING PIGS A PELLETED, COMPLETE RATION?

Early trials in feeding pigs from weaning to market weight showed no advantage from pelleting when corn was the only grain in a mixed ration. Pelleting both grain sorghum rations and barley rations improved feed efficiency and rate of gain to some extent. Results with wheat and oats were inconsistent. However, in recent tests where finely ground corn was pelleted, pelleting feed improved feed efficiency and gain about 10 percent.

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5/8/64

FOR IMMEDIATE RELEASE

UI Farm Machinery Day
Set For May 26

URBANA--Discussions of narrow rows for corn, oriented corn and corn drying and storage will highlight the 1964 University of Illinois Farm Machinery Day set for May 26 in Urbana.

Of special interest to implement dealers will be a talk by St. Louis architect John A. Grunik, who will discuss designs for new and remodeled dealer buildings. Grunik's architectural firm specializes in the design of industrial and commercial buildings similar to those in demand by farm equipment dealerships.

U. of I. agricultural engineer Wendell Bowers says other features of the program will be reports on tractor repair and maintenance costs and the new SMV emblem for tractor safety. A report on field corn losses and harvesting costs and a panel discussion of common problems in disposing of used equipment complete the program.

Bowers says the Farm Machinery Day program will begin at 9:00 a.m. in the U. of I. Assembly Hall.

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5/8/64

FOR IMMEDIATE RELEASE

County Farm Advisers Go Back To School

URBANA--This week, May 12 through 14, 175 Illinois county farm advisers and their assistants are attending classes at the University of Illinois.

These county agricultural cooperative extension staff members will be learning the latest information in their field in a total of 20 hours of classroom work. Much of the material presented to them by College of Agriculture professors and state extension staff is from results of the latest research in the Illinois Agricultural Experiment Station.

From a list of 10 courses offered, advisers may choose either two 10-hour courses or one of two 20-hour courses in forage crop production and handling or photography during the three-day annual Spring Extension Conference. Additional session topics include live animal and carcass evaluation, farmers' use of futures markets, resource development, agricultural policies, problems and programs, brush-up on radio, current problems in livestock marketing, farm management problems, rural social organization and change, land values and the farm land market and farm building materials.

Also on the conference agenda are a board meeting of the Illinois State Association of Farm Advisers on Monday evening and a full association meeting on Tuesday afternoon, personal conferences with specialists at the college and an informal smoker Wednesday evening with department heads and new staff.

A joint luncheon with home economics extension staff members Thursday noon in the Illini Union precedes an administrative session in the University Auditorium with Dr. J. B. Claar, associate director of the Illinois Cooperative Extension Service, University of Illinois College of Agriculture.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

1964 Illinois FFA Convention At Urbana, June 9-11

URBANA--The 36th annual Illinois FFA Convention will meet in the University of Illinois Assembly Hall in Champaign-Urbana on June 9-11. Meals and lodging will be provided in nearby University housing.

About 2,000 Illinois farm boys, representing more than 16,000 FFA members studying vocational agriculture throughout the state, are expected to attend. Two delegates from each of the state's 441 FFA chapters will make up the voting body and will conduct convention business.

Kent Slater, president of the Illinois Association, FFA, Augusta, reports that Joseph Coyne, national FFA vice president from Minooka, Illinois, will give one of the major convention addresses. Special guests will include state FFA presidents from Indiana, Kentucky and Iowa.

Convention highlights will include selecting the winner of the state FFA prepared public speaking contest, electing state officers, presenting state Foundation awards and naming the Star Farmer of Illinois, which is the highest honor given by the Illinois FFA. More than 320 Illinois FFA members will receive their State Farmer Degrees, and 16 American Farmer candidates will be announced.

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5/12/64

FOR IMMEDIATE RELEASE

Farm Managers To Tour Dixon Springs Experiment Station June 11-12

URBANA--About 75 members of the Illinois Society of Professional Farm Managers and Rural Appraisers are expected to take part in the Society's summer tour of the University of Illinois Dixon Springs Experiment Station on June 11-12, according to extension economist D. E. Erickson. Tours of two typical southern Illinois farms and recreational facilities in the area are also scheduled.

A bus tour of the 5,000-acre southern Illinois research center will show the visitors how the once severely depleted soils can now support a 400-head beef cow herd and a 1,000-head ewe flock. Station personnel will explain methods they used to increase roughage yields, both hay and pasture, on poor soil. Reforested areas on extremely rough and poor land are also included in the tour.

Research viewed on the tour will include work in improving vegetable crops, development of plastic greenhouses, early weaning of lambs, control of sheep parasites and work on zoonoses--diseases that can be transmitted from animals to man and from man to animals.

Two typical southern Illinois farms near the Station will also be toured. One 750-acre farm sells feeder calves from a 150-head beef cow herd. The other farm produces feeder pigs and constructs livestock buildings on the farm from home-sawed lumber.

Recreational areas to be visited in the area include Dixon Springs State Park, Cave-in-Rock State Park and Pounds Hollow Recreational Area.

Society officers for 1964 are Owen W. Strine, president, Streator; E. H. Foreman, first vice president, Bloomington; Russell E. Thorpe, second vice president, Sterling; and Fay M. Sims, secretary-treasurer, Urbana. Summer meeting and tour committee members include Robert S. Nolen, chairman, Carmi; Frank M. Case, Mount Vernon; Kenneth S. Cook, Johnston City; Duane E. Erickson, Urbana; Dean E. Damper, Belleville; Kermit J. Kruger, Fairfield; and Leonard Vogt, Red Bud.

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5/12/64
NO

FOR IMMEDIATE RELEASE

Cultural Practices And Optimism Produced Record Corn Crop

URBANA--Early planting, unusually good stands, high rates of fertilizer, excellent weed control and relatively little insect and disease damage, combined with good weather at harvest and a large dose of optimism on the part of Illinois farmers, produced a record yield of 85 bushels of corn per acre last year. Many farmers had confirmed yields of 150 bushels or more. This record was achieved after it appeared about July 1 that dry weather would seriously reduce yields.

Barely adequate, but well-timed rainfall in July saved the crop, says University of Illinois agronomist S. R. Aldrich, who conducted a survey of corn-growing practices for the 1963 crop. In areas with lowest rainfall, the soil type, long-term management and fertility programs and early weed control were unusually influential in determining corn yields. Farmers who gambled on favorable weather and used their usual good cultural practices harvested a bumper crop.

The weather during the 1963 season was more favorable for corn than it may have appeared, says Aldrich. Temperatures were above normal from April to mid-May and below normal in July and August. Below-normal moisture in April, May and June was adequate for germination. It promoted early planting and good weed control through cultivation. Rainfall in July and August was well distributed just before and after silking, the most critical time for corn.

The survey re-emphasizes the need for early planting. Farmers who reported planting corn from April 21 to 30 made 107.7 bushels per acre, while those planting from May 11 to 20 made only 97.8 bushels. For those planting on June 1 and later, yield dropped to 71.9 bushels per acre.

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Early tasseling--related to early planting--also favored high yields. Corn tasseling earlier than average made 108.1 bushels, while corn that was later than average for the neighborhood made 100.7 bushels.

Yields increased rapidly with increasing population even in a year in which rainfall was much below normal except for July. Farmers reporting plant populations of 18,000 to 20,000 had yields of 136.1 bushels. Farmers reporting populations of 16,000 to 18,000 harvested 115.8 bushels, and those who reduced plant populations to 14,000 to 16,000 also lowered their yields to 108.4 bushels per acre. Yields dropped markedly as farmers reduced populations from 14,000 to 10,000 plants per acre. Research shows that the total amount of water removed from the soil is nearly the same for all plant populations generally used, says Aldrich. In thin stands less water is taken up by the plants but more evaporates from the soil surface, and the total water that disappears from the soil tends to remain nearly constant. In thick stands, plants shade each other and less water transpires from the leaves.

Fall plowing outyielded spring plowing by 15.4 bushels per acre on fields reported in the survey. This advantage was found for all crops except wheat with a legume seeding. In years with plentiful rainfall, corn yields are highest following a legume green manure or hay crop. But last year moisture was lacking in the early part of the growing season. Aldrich believes that 1962 corn and beans stopped using water when they matured in late September and October, while the sod continued to use water until a later date in the fall.

The most commonly reported range was 60 to 120 pounds of nitrogen per acre, 9.2 to 26.4 pounds of phosphorus (21 to 60 pounds of P_2O_5) and 0 to 60 pounds of potassium (0 to 60 pounds of K_2O). On 68 percent of the fields with no legume and manure, fertilizer was applied through the planter, on 42 percent it was sidedressed, on 36 percent it was applied in the spring before planting and on 20 percent it was applied the previous fall.

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5/12/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Note to Editors: A 1-column mat of Joseph Coyne accompanies this story.

National FFA Officer From Illinois To Address State FFA Convention

URBANA--Joseph Coyne, 21, of Minooka, national vice president of the Future Farmers of America, will be a featured speaker at the 36th annual Illinois FFA Convention to be held June 9-11 at Champaign-Urbana.

More than 2,000 Illinois Future Farmers are expected to attend the state convention, which will meet for the second year in the University of Illinois Assembly Hall.

State FFA officers who will preside over the convention are Kent Slater, Augusta, president; Robert Potts, Williamsfield, vice president; and Ron Scherer, Claremont, secretary-treasurer. Two official delegates from each of the state's 441 local FFA chapters will comprise the voting body to conduct convention business.

The visiting national officer, Joseph Coyne, was elected to his position last October at the national FFA convention in Kansas City, Mo. He previously served as Illinois FFA vice president. He was valedictorian of his graduating high school class and has been an honor student through two years of college. During his year of service as national FFA vice president, Joe is taking leave of absence from his agricultural studies at the University of Illinois.

Joe lives with his parents, Mr. and Mrs. Francis Coyne, on a grain and livestock farm about 50 miles southwest of Chicago. Joe farms 160 rented acres and also has a partnership interest with his father in swine and beef enterprises.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

University Of Illinois Research Shorts

UNIVERSITY OF ILLINOIS RESEARCH indicates that using processed whole soybeans in swine rations may offer some interesting possibilities. The study showed that 22- to 33-pound pigs fed rations containing processed whole soybeans had significantly higher gain-feed ratios than control pigs fed a standard ration containing soybean meal.

Average daily gains for pigs on the soybean-flour ration were somewhat below those for pigs on the control ration. However, pelleting boosted rates of gain to levels equal to those on the control ration.

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EXTREMELY HIGH-TEMPERATURE DRYING OF CORN showed little effect on its nutritional value in a test with baby pigs. Eighteen-day-old pigs fed a ration containing corn dried at temperatures between 700° and 900° F. gained just as well as a control group fed corn dried at normal temperatures.

Corn in the test was harvested at moisture contents of 17, 21 and 28 percent. The corn was passed through a small laboratory-model rotary drum dryer where air temperatures of 700 to 900 degrees dried it in 2 1/2 to 7 minutes. The high temperatures did affect milling quality of the corn and had to be carefully controlled.

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U. OF I. ANIMAL BIOCHEMISTS are continuing research which indicates that heavy refeeding after long periods of starvation can cause permanent damage to the heart and blood vessel tissue of swine.

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The study was made to investigate reports of similar damage to the cardiovascular systems of humans subjected to starvation or long semi-starvation. The hogs received no feed for periods ranging from 30 to 40 days during various phases of the study. In present studies, the hogs are exercised on a treadmill to check the effect of exercise during long periods of starvation.

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A GROUP OF EARLY-WEANED PIGS gained as well on a combination of Illinois 16 (a grower ration) and dried skim milk as another group did on a complex starter ration (Illinois 20) in recent U. of I. tests.

The grower ration was a simple combination of 67 percent Illinois 16 and 33 percent dried skim milk. Pigs on this ration averaged .52 pound daily gain and ate 1.65 pounds of feed per pound gained. This result compared with a .55 pound daily gain and 1.76 pounds of feed per pound gained for pigs on the complex starter ration.

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U. OF I. POULTRY RESEARCHERS have conducted a number of experiments with a 12 percent protein corn-soya laying ration to find how adequate it is in essential amino acids. Poultrymen could save considerable money by reducing the protein level from the conventional 15 percent to 12 percent of the ration.

Research to date indicates that 12 percent protein corn-soya laying rations will adequately support top egg production under some conditions. Further studies are planned to find which amino acids are needed to make these rations adequate under all conditions.

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PELLETED RATIONS SHOWED ABOUT a 10 percent greater feed efficiency than the same rations in meal form in recent U. of I. swine studies. The greater feed efficiency with pellets could not be attributed to differences in feed wastage.

Expressed in terms of gain per 1,000 pounds of feed, pelleting produced about 25 more pounds of gain than the meal ration. Feeding finely-ground corn rather than medium-grind was worth an additional five pounds of gain per 1,000 pounds of feed. There was no evidence that pelleted rations increased the number or severity of gastric ulcers.

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U. OF I. AGRICULTURAL ENGINEERS have recently developed an adjustable swath-width spray assembly designed especially for roadside spraying. The assembly has six spray nozzles. Each nozzle covers a separate area of the roadside for a total distance of 20 feet. A boom assembly increases the distances covered. The operator simply turns the independent nozzles off or on as the roadside narrows or widens.

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HDN:ml
5/22/64

FOR IMMEDIATE RELEASE

Agronomy Field Days Set;
150 Bushel Corn "Recipe" Featured

Editors note. Story of primary interest to southern Illinois.

URBANA--The first of a series of field days bringing southern Illinois farmers the latest agronomic research will start at 9:30 in the morning June 11 at the Brownstown Research Center in Fayette county. Among other money-making practices, agronomist Pat Johnson will present his famous "recipe" for 150 bushels of corn per acre. With complete soil treatment--lime, nitrogen, phosphorus and potassium--Johnson has produced 150-bushel corn and 60-bushel wheat on Cisne soil. Without this kind of treatment, the Cisne soil is one of the lowest producing in the state.

Other features at the Brownstown Field Day include the latest pre-emergence chemical controls for corn and soybeans, chemical vs. mechanical cultivation, "all out" nitrogen on winter wheat, deep plowing, small grain varieties, forage mixture studies, continuous corn vs. rotation, forestry management studies and a display of new machines for minimum tillage.

Visitors at the Toledo Field Day June 12 will see some of the best potassium studies in the state. These studies feature varying rates and times of application. Other features at Toledo include soil conditioner studies, narrow-row soybeans, no-cultivation soybean plots and small grain variety plots. The field day starts at 1:30 p.m. with agronomist Pat Johnson in charge.

Researchers are tackling one of the real problems on Cisne soils. "Slick spots" or high sodium deposits will be one of the features at the Newton Field Day June 15. The meeting starts at 1:30 under the direction of agronomist Pat Johnson. Other features include continuous corn, corn and soybeans interseeded with a cover crop, intensive cash grain fertility and management on Cisne soils and time of nitrogen application on wheat studies.

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JJF:cf
5/22/64

COOPERATIVE EXTENSION SERVICE
in Agriculture and Home Economics
COLLEGE OF AGRICULTURE

Urbana, Illinois
June 1, 1964

To All County Farm Advisers:

As you know, we recently revised the enclosed publication on "Interagency Cooperation in Soil and Water Conservation in Illinois." Copies have been sent to the other six cooperating agencies, in addition to the copies you have already received.

We are most anxious that the general public be informed about the fact that these agencies are working together to coordinate the important task of preserving the vital natural resources of soil and water for future generations. Although these seven agencies realize that other public and private groups have important responsibilities, they also recognize the fact that a heavy share of responsibility rests with them. The publication outlines the program of cooperation and the individual plans and objectives of each of the agencies.

Included with this copy of the booklet are a news story and an editorial that will help you give this information appropriate local coverage. This material is similar to that sent directly to editors with the original copy of the booklet when it was first issued in 1961. We sincerely hope that you will find this material usable by your county media editors.

Sincerely yours,

J.B. Claar

J. B. Claar, Associate Director
Cooperative Extension Service
University of Illinois

JBC:cf
Enc.

STATE · COUNTY · LOCAL GROUPS · UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

FOR IMMEDIATE RELEASE

State And Federal Agencies Cooperating In Soil And Water Conservation

Seven state and federal government agencies are cooperating in an overall plan to conserve Illinois' soil and water resources.

These agencies aim to strengthen and increase cooperation in carrying out their assigned duties, according to ___________________, _______________ County Farm Adviser. They have agreed to these general policies:

1. All agencies will seek to improve their educational programs for soil and water users if they have any responsibilities in this area.

2. All agencies will work with local agencies and people to achieve maximum progress.

3. Staff members of these agencies will meet at regular intervals to discuss policies and any problems that may arise in carrying out their programs at both state and local levels.

4. All agencies will strive to understand each other's responsibilities and use the facilities of each agency in a total conservation program.

5. The real goal of all agencies is to get conservation practices on the land.

6. The public and particularly those employed by each agency should know what each agency is prepared to do.

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Agencies cooperating in this program include the Illinois Department of Agriculture, Illinois Department of Conservation, Superintendent of Public Instruction, Illinois Agricultural Stabilization and Conservation Committee, U. S. Farmers Home Administration, U. S. Soil Conservation Service and University of Illinois College of Agriculture, Agricultural Experiment Station and Extension Service in Agriculture and Home Economics.

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RAJ:tl
6/1/64

Suggested Editorial For Illinois Newspapers

Soil And Water Conservation Essential For Future Food Supply

Soil and water conservation is vital to assure a continuing food supply for a rapidly growing nation such as ours. Congress and our state legislature have recognized this need and have assigned certain responsibilities for conservation to a number of agencies.

Leaders of seven of these agencies in Illinois are cooperating in a plan that should strengthen the various efforts being made to keep soil and water on the farms where it is most valuable.

These seven agencies and their major responsibilities are listed below:

The Illinois Department of Agriculture is responsible for administering the State Soil and Water Conservation District Law. This law provides for organizing and operating soil conservation districts.

The Illinois Department of Conservation promotes conservation of soil and water to the end that these resources may produce maximum usable forest, wildlife, fish and recreational resources for the benefit of all people.

The State Superintendent of Public Instruction, through the Division of Conservation Education, promotes and encourages the teaching of resource conservation in elementary and high schools.

The Illinois Agricultural Stabilization and Conservation Committee encourages and assists farmers in accomplishing soil and water conservation. Financial assistance is given through the Agricultural Conservation Program.

The Farmers Home Administration, through its loan programs, encourages and helps eligible persons to finance soil conservation and water development.

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The Soil Conservation Service helps landowners to develop conservation plans and provides technical services for carrying out these plans.

The University of Illinois College of Agriculture, through its teaching, research and extension programs, has as one of its major objectives facilitating conservation and sound soil and water use.

To realize these objectives, it is necessary that all citizens work together continuously with these agencies to help conserve soil and water, two of our most valuable natural resources.

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RAJ:tl
6/1/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Five Illinois Future Farmers Are Star State Farmer Candidates

URBANA--Five Illinois Future Farmers remain in hopeful competition for the Star State Farmer award, the highest honor given by the Illinois Association, Future Farmers of America.

Winner of the coveted Star State Farmer award will be announced Thursday afternoon, June 11, at the closing session of the 1964 Illinois FFA Convention in the University of Illinois Assembly Hall at Champaign-Urbana.

The five final contenders include Marvin Martin, 17, son of Mr. and Mrs. Marion Martin, Kewanee; Eddie McMillan, 18, son of Mr. and Mrs. Keith McMillan, Bushnell; Dennis Myelle, 18, son of Mr. and Mrs. Perry Myelle, Kingston; Ronald Schaufelberger, 17, son of Mr. and Mrs. Dale Schaufelberger, Greenville; and Gary Schwab, 18, son of Mr. and Mrs. Steward Schwab, Litchfield.

Selection of the award winner is based on the size, growth and earnings of his vo-ag supervised farming program, FFA achievements, scholastic abilities and school and community activities. Judges consider how well the applicants have fulfilled the primary aims of FFA--developing leadership, cooperation and citizenship.

These five outstanding Illinois Future Farmers were selected from more than 16,000 FFA members studying vocational agriculture in 441 Illinois high schools. FFA is an integral part of the vocational agriculture program. Ralph Guthrie, chief of agricultural education in Illinois, is official advisor to the Illinois FFA.

The Illinois Association FFA is part of the nationwide Future Farmers of America organization, which has nearly 400,000 members in all 50 states and Puerto Rico.

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WDB:ml
6/2/64
NO

FOR IMMEDIATE RELEASE

Southeastern Ag Leaders To Tour Chicago Area Farms

URBANA--More than 175 agricultural leaders from North Carolina and the southeastern United States plan to visit farms in Cook, Will and Kendall counties on June 17 and 18. This is the Illinois section of an agribusiness tour sponsored by the Wachovia Bank and Trust Company, Winston-Salem, North Carolina.

Dean Louis B. Howard of the University of Illinois College of Agriculture, in announcing the tour plans, said that the visiting group would include Dr. John T. Caldwell, chancellor, and Dr. Brooks James, dean of agriculture, North Carolina State University, and The Honorable L. Y. Ballentine, director of the North Carolina Department of Agriculture.

First stop on the tour on Wednesday morning will be at the DeJong Vegetable Farms, Volbrecht Road, Lansing, where the group will inspect the 300-acre farm operated by four brothers. Radishes, green onions, spinach, Bibb and leaf lettuce, green beans and cabbage produced on this farm are sold mainly to commission firms in the Chicago market.

The second Wednesday morning stop will be at the Leo Bernhard hog farm, Elwood. This operation features 280 acres of continuous corn and 3,000 hogs fed each year on a 320-acre farm.

After lunch the group will inspect the Fred Munroe poultry farm near Plainfield and the Sunny Valley farms near Yorkville. The Munroe enterprise features 90,000 hens producing eggs in three contolied-environment laying houses. Its processing plant is equipped to pack 10,000 dozen eggs in eight hours. At the 1,082-acre Sunny Valley farms,

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the visitors will see a combined beef and hog setup in which 800 Hereford steers are fed to market weight and 800 head of hogs are raised and sold each year.

On Thursday morning, the southeastern farmers and agricultural leaders will visit the Chicago Port Authority facilities at Lake Calumet, where they will see 6,000 feet of modern steel dockage facilities, transit sheds, a 200,000-square-foot harbor warehouse and 13 million bushels of grain storage. Wachovia Bank and Trust Company, Winston-Salem, North Carolina, tour sponsors, will be hosts at a luncheon in the Palmer House in Chicago.

Final stop of the agribusiness tour will be the Wayne Research Center, Allied Mills, Inc., Libertyville, on Thursday afternoon, where the group will see extensive swine, beef, dairy, layer, broiler and turkey testing programs in operation. A feed mill on the station mixes more than 2,500 different formulas a year to be tested.

In addition to Dean Howard, University of Illinois hosts on the tour will include M. S. Williams, assistant director of the Illinois Cooperative Extension Service; H. G. Halcrow, head of the Department of Agricultural Economics; county farm advisers in the counties visited, and state extension specialists.

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RAJ:tl
6/2/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

State 4-H Club Week Program Set For June 16-19 In Urbana

URBANA--More than 1,400 Illinois 4-H'ers will explore educational and career opportunities during the 1964 Illinois 4-H Club Week program set for June 16-19 on the University of Illinois campus. For the first time the annual 4-H conference will be held in the giant U. of I. Assembly Hall.

"Education for Action" is the theme of the program, which will feature career workshops, career tours and a talk entitled "Career Horizons" by Tom Ware, president and chief executive officer of International Minerals & Chemical Corporation.

College of Agriculture staff members also will be on hand during parts of the program to answer questions about college courses and career opportunities after college.

Other objectives of the program are to review and discuss 4-H project and activity goals in Illinois. More than 25 special-interest workshops on 4-H subjects ranging from "Let's Put Colors in Your Home" to "Pictures for Pleasure" and "4-H Peace Corps Opportunities" also will be available to 4-H'ers attending the conference.

Entertainment features of the program include a barbecue near the U. of I. football stadium, a tour of the stadium conducted by assistant athletic director Ray Eliot and a 4-H friendship party in the Illini Union Building.

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Another major highlight of this year's program will be a special performance by the 170-member Illinois 4-H chorus made up of 4-H'ers from all parts of the state.

Featured speakers for the event are Ware and Dr. Evelyn Millis Duvall, noted author and family life consultant.

Besides his work at IMC, Ware is currently board chairman of the American Freedom From Hunger Foundation. Last year he was chairman of the host committee of the World Food Congress, in which 1,200 delegates from 100 nations met to examine ways of winning the world-wide battle against hunger.

Mrs. Duvall is widely known for her many guidebooks in the field of family life education. She has written a number of books and is co-author with her husband of the syndicated daily column, "Let's Explore Your Mind."

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HDN:ml
6/4/64

FOR IMMEDIATE RELEASE

Better Use Of Nitrogen Points Way To Higher Corn Yields

URBANA--Lower cost per bushel for producing corn is the goal of a study to be made by a University of Illinois research team, helped by a $40,000 USDA grant to the Illinois Agricultural Experiment Station.

The research group, comprising R. H. Hageman, plant physiologist and Earl R. Leng, plant breeder and geneticist, and their graduate students, plan to probe deeply into how the corn plant uses nitrogen.

A major feature of this study, "The Genetic and Environmental Control of Nitrogen Metabolism in Corn," will be the integration of field tests and laboratory research. Physiologists and breeder-geneticists will apply their specialized training to the major problems in a search for conclusions that may be widely applied.

Although much is already known about how corn uses nitrogen, this grant could help to bring new knowledge about how and when the plant metabolizes and uses nitrate, the role of the major enzyme systems in grain production, the relation between hybrid vigor and rate of enzyme synthesis and the hereditary control of enzyme activity.

One objective will be to correlate the major stages of plant development with nitrate utilization throughout the season, with special emphasis on tasseling and ear initiation.

The scientists will seek information about the relation between the daily intake of reduced nitrogen, the amount of nitrogenous reserves in the whole plant and the various stages of growth.

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They will attempt to regulate the rate of nitrate intake at those stages that are critical for grain yield. They will also test the ability of plant hormones, 2,4-D and other substances to increase the rate at which the plant utilizes nitrogen.

They will try to pinpoint the role of the enzyme nitrate reductase in enabling hybrids to grow faster, to become bigger and to produce more stover and grain than their inbred parents.

One ultimate objective is to work out ways of breeding plants with even more efficient nitrate metabolism than present varieties and hybrids have. Crosses between corn and its wild relatives, teosinte and tripsacum, will be part of this investigation.

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CGW:ml
6/5/64

FOR RELEASE 3 P.M. THURSDAY, JUNE 11, 1964

Bushnell Youth Wins Top Illinois FFA Award

URBANA--Eddie McMillan, 18, member of the Bushnell-Prairie City FFA Chapter, was named Star State Farmer of Illinois Thursday during the closing session of the 36th annual Illinois FFA Convention at Champaign-Urbana.

The Star State Farmer award is the highest one presented by the Illinois Association, Future Farmers of America. Robert M. Schneider, director of the Illinois Department of Agriculture, presented the award.

As Star Farmer of Illinois, Eddie will represent Illinois in competition for the regional Star Farmer award this fall.

Eddie was selected from a field of 16,071 FFA members studying vocational agriculture in 441 Illinois high schools. Five District Star Farmers remained in the running for Star State Farmer as the convention opened Tuesday. In addition to Eddie, they were Marvin Martin, 18, Kewanee; Dennis Myelle, 18, Kingston; Ronald Schaufelberger, 17, Greenville; and Gary Schwab, 18, Litchfield.

Eddie, son of Mr. and Mrs. Keith McMillan, Bushnell, has just completed four years in vocational agriculture and FFA. He started his farming program as a freshman with 13 Suffolk sheep and 10 Polled Hereford cattle. With the encouragement of his parents and the instruction and supervision of his vo-ag teacher, C. E. McGrew, his farming projects

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have expanded and changed until he now has 44 head of beef cattle, 6 Duroc gilts, 40 Mallard ducks, 68 acres of corn, 40 acres of soybeans, 50 acres of oats, 40 acres of legumes and 100 acres of pasture.

The new Star State Farmer says, "Through the years I have learned many things from working with my livestock and crop projects. I like working with purebred livestock, and I especially enjoy showing them at fairs."

Eddie's path to the Star State Farmer award has included winning the Star Farmer award at the chapter, sectional and district levels. His FFA Foundation winnings include awards for sheep, beef, corn, small grain, soybeans, crop and livestock farming in the Bushnell-Prairie City FFA Chapter; sheep and livestock farming in vo-ag Section 11; and livestock farming in District III.

His other FFA activities include participating in livestock judging, land-use judging and parliamentary procedure teams; and competing in extemporaneous public speaking contests at chapter, sectional and district levels. He also won the chapter scholastic award and the DeKalb Outstanding Senior Award.

He has held chapter FFA offices of president, vice president and sentinel. He is currently secretary of FFA Section 11 and has served as sectional treasurer.

Somehow Eddie found time and energy to excel in school and other activities in addition to FFA and vo-ag. He served as class officer and as a member of the student council, science club and yearbook staff. He was elected to the National Honor Society.

He took part in sports all four years in high school and won a letter in football. He was also a member of the marching, show and pep band at Bushnell-Prairie City High School.

He is active in 4-H and is now president of the McDonough County 4-H Federation.

As to the future, Eddie plans to attend the University of Illinois College of Agriculture and major in agricultural economics. After college he wants to return to the farm.

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WDB:ml
6/5/64
NO

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Vo-Ag Teachers Go Back To College

URBANA--Helping 450 Illinois vocational agriculture teachers keep up to date on the latest technical and scientific agricultural knowledge is a big job.

One way teachers can keep up with the nation's rapidly changing agriculture is to return to school. Vo-ag teachers from all over the state will meet June 15-18 at the University of Illinois for the Annual Vocational Agriculture Teachers Conference.

The conference theme, "Changing Vocational Education in Agriculture in the Mid-60s," will be featured throughout the program.

Vo-ag teachers have enrolled for 22 short courses in the areas of agricultural economics, agricultural engineering, animal science and plant and soil science, according to Harold Witt of the College of Agriculture Vocational Agricultural Service. The courses are taught by College of Agriculture staff members.

Tours are also arranged to take teachers on a quick swing around the University research farms. Short explanations of the research being conducted at each of ten stops will introduce the vo-ag teachers to both the current agricultural experiments and the staff members doing the work. The vo-ag teachers can then return to areas that interest them and can contact the research men involved.

The keynote speaker for the conference, R. E. Naugher, assistant director of the Department of Health, Education and Welfare, Washington, D. C., will explain new developments in vocational education resulting from the Vocational Education Act of 1963. Panel

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discussions and other speakers will point out how the act will affect Illinois vocational education in agriculture.

The Illinois Association of Vocational Agriculture Teachers will also meet during part of the conference program to conduct business, elect officers and plan programs of work. William Martinie, Minonk, is now IAVAT president.

Ralph A. Guthrie, chief of agricultural education in Illinois, coordinates planning for the annual vo-ag conference.

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WDB:cm
6/8/64
NO

COOPERATIVE EXTENSION SERVICE
in Agriculture and Home Economics
COLLEGE OF AGRICULTURE

Note to Editors:

The 1964 state convention of the Illinois Future Farmers of America begins Tuesday, June 9, in the University of Illinois Assembly Hall at Champaign-Urbana.

As in previous years, the three-day convention will involve FFA boys from your area as delegates, award winners or special participants. We have instructed each chapter to give you this information, but some may fail to do so. You could probably turn up some good local stories by calling the vocational agriculture teacher in your area to find out who is attending the convention and for what reasons.

Our office will again handle the statewide news coverage for the convention. This packet contains advance news stories with release dates. Stories breaking at the convention, such as the election of officers, public-speaking winners and others, will be available to the wire services. You may want to request these stories and others about chapters in your area from the Associated Press and United Press International.

A team from the Extension Editorial Office will establish press headquarters in the press room in the Assembly Hall. The coverage team from this office will include J. J. Feight, John Woods, Glen Broom and Dave Beckenholdt. If you would like pictures of boys from your area, our photographer can supply them.

Let us know if we can help you cover this major Illinois farm youth event. If you plan to attend the convention, we'll be looking for you at press headquarters.

Sincerely,

Hadley Read

Hadley Read
Extension Editor

HR:bl
6/11/64
NO

FOR RELEASE P.M. THURSDAY, JUNE 11, 1964

State FFA Convention Names
15 Honorary State Farmers

URBANA--Robert Schneider, Director of the Illinois Department of Agriculture, and 14 other men received the gold State Farmer Key Thursday afternoon as the Illinois FFA conferred upon them the Honorary State Farmer degree.

This is the highest honor the Illinois Association, Future Farmers of America, can give to an individual. The association presents these awards annually in recognition of outstanding service to the field of vocational agriculture.

Receiving the awards were Robert Schneider, Springfield, Director, Illinois Department of Agriculture; Les Potts, Williamsfield, father of the state FFA vice president; E. R. Scherer, Claremont, father of the state FFA secretary-treasurer; Bill Martini, Minonk, president of the Illinois Association of Vocational Agriculture Teachers; Morris White, Bushnell, editor, McDonough Democrat; Virgil Smith, Metropolis, station manager, WMOK; Art Sechrest, Olney, farm director, WLVN; Paul Tetchum, Pekin, Pekin Daily Times; Kenneth Cheatham, Bloomington, director of young people's activities, Illinois Agricultural Association; Franklin Rust, Springfield, manager, Illinois State Fair; Don Morrissey, Minooka, vocational agriculture teacher; Paul Hawkins, Oakland, Section 20 committee member, Illinois Foundation FFA; Harry Bretzlaff, Champaign, Section 17 chairman, sectional sponsoring committee, Illinois Foundation, FFA; Charles Schettler, Wapella, vocational agriculture teacher; and Keith Wehner, Rochelle, vocational agriculture teacher.

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WDB:ml
6/2/64
NO

FOR RELEASE P.M. THURSDAY, JUNE 11, 1964

Illinois FFA Announces American Farmer Candidates

URBANA--Sixteen Illinois Future Farmers were named today at the state FFA Convention as 1964 candidates for the American Farmer degree. Only one boy in a thousand can expect to win this highest degree conferred by the Future Farmers of America.

These members will receive the gold emblem key of the American Farmer degree in October during ceremonies at the National FFA Convention in Kansas City, Missouri.

To be named American Farmer, an FFA member must have earned at least $1,000 from his supervised farming program which he started while taking vocational agriculture in high school. Candidates for the degree must also show outstanding scholarship, cooperation, thrift and leadership abilities through participation in FFA, school and community activities.

American Farmer candidates from this area are (see list below):

Name	Address
Donald Butler	Pittsfield
Jack Corum	Champaign
Phillip Freesmeyer	Pleasant Hill
Ron Gehrig	Wyoming
Richard Jenkins	Dwight
Leroy Klitzing	Altamont
Victor Korves	Valmeyer
Fred Mohr	Broadlands
Gary Moody	Bethany
Lester Potts	Williamsfield
Ted Pyatt	Pinckneyville
Richard Ramsdell	Franklin Center
Ron Scherer	Olney
Kent Slater	Augusta
Charles Trader	Sesser
George Wyciskalla	Waltonville

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WDB:ml
6/2/64
NO

FOR RELEASE A.M. WEDNESDAY, JUNE 10, 1964

Thirty Illinois FFA Members Win Trips To Nation's Capital

URBANA--Because they excel in understanding the American way of life, 30 Illinois Future Farmers will soon be taking an expense-paid trip to the historic Eastern United States.

These 30 boys are members of winning FFA chapters in the American Heritage Contest. Winners announced this morning during the 36th annual Illinois FFA Convention in Champaign are, first place, Tonica, and second, Paxton. Runner-up chapters include Williamsfield, Waterman, Maroa, Carlinville, Bethany and Cisne.

The historic trips are awarded to seven FFA members from the first-place chapter, five from the second-place chapter and three from each of the runner-up chapters. Trophies also are awarded to the first- and second-place winners, and plaques to the other six chapters.

Accompanying the boys on the trip will be George O. Irvine, Tonica, and Robert L. Rohlfing, Paxton, vocational agriculture teachers from the first- and second-place chapters; the Farm Bureau Secretary of Organization from LaSalle County; a state vocational agriculture supervisor; and a representative of the Illinois Agricultural Association and affiliated companies.

The purpose of the contest is to stimulate an appreciation and understanding of the basic principles of the American way of life.

The IAA and affiliated companies sponsor the American Heritage Program.

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WDB:ml
6/2/64
NO

FOR IMMEDIATE RELEASE

Top Illinois FFA Chapters Compete For Awards

URBANA--The four superior FFA chapters in Illinois, plus the single top chapter, will be announced Tuesday evening, June 9, the opening day of the 36th annual Illinois FFA Convention at Champaign-Urbana.

Fourteen outstanding "gold emblem" chapters remain in competition for these annual awards. They are Belvidere, Central of Clifton, Champaign, Geneseo, Jacksonville, Lawrenceville, Mahomet, Maroa, Paxton, Sycamore, Wapella, Warren at Monmouth, Williamsfield and Williamsville.

The four FFA chapters that are selected for the superior chapter awards will compete in the national chapter award program in October at the national FFA convention in Kansas City, Missouri.

Consideration for the superior chapter award includes all activities of an FFA chapter. Community service, leadership, scholarship, supervised farming, cooperation and conduct of meetings are only a few of an FFA chapter's areas of work.

The 14 competing chapters were selected from 441 FFA chapters in Illinois high schools teaching vocational agriculture. Illinois FFA membership now totals 16,071.

Earlier in the year one chapter in each of the 25 vocational agriculture sections was selected to receive a plaque provided by the Illinois Bankers Association. These chapters were judged to have conducted the best program of work in their respective sections.

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Chapters winning Bankers Association plaques in this area are (see list below):

FFA Chapters Winning Bankers Association Plaques

1. Elizabeth
2. Sterling
3. Geneseo
4. Williamsfield
5. Brimfield
6. Belvidere
7. Waterman
8. Dwight
9. Heyworth
10. Clifton
11. Bushnell-Prairie City
12. Manito
13. Griggsville
14. Williamsville
15. Jacksonville
16. Maroa
17. Paxton
18. Rankin
19. Assumption
20. Altamont
21. Salem
22. New Athens
23. Allendale
24. Pinckneyville
25. Metropolis

WDB:ml
6/2/64
NO

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE MONDAY P.M., JUNE 22, 1964

UI Dairy Researchers May Have Key To Milk Fever Prevention

TUCSON, Ariz.--University of Illinois dairy scientists may have achieved a breakthrough in the age old battle against milk fever in dairy cows.

In a paper presented here today before the annual meeting of the American Dairy Science Association, U. of I. dairy scientist K. A. Kendall described what appears to be a simple preventative measure against milk fever.

Kendall said the key to milk fever prevention in the U. of I. tests was simply a matter of boosting grain feeding from the usual .5 percent or less of body weight, up to 1 percent of body weight during the final three weeks of the cow's pregnancy.

Kendall said that six cows were used in the test, one Ayrshire, one Jersey and four Holsteins. Each cow had a previous history of milk fever.

The cows all showed significantly higher blood levels of serum calcium and inorganic phosphorus following periods of heavier grain feeding than they had following previous calvings which had resulted in milk fever.

"Blood serum calcium levels averaged 5.1 during calvings when the cows developed milk fever," Kendall said. "This compared with an average level of 7.9 for these same cows in our recent studies.

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"After being fed grain at the level of one percent of body weight for at least three weeks prior to calving, all of the cows appeared normal in contrast to clinical symptoms of milk fever which occurred in previous parturitions."

Kendall said the study is being continued in the university herd and in three high producing Illinois herds. Further research is also now underway to study the underlying causes for the responses of milk fever suspects to higher grain feeding levels during the latter part of the dry period.

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HDN:ml
6/16/64

FOR IMMEDIATE RELEASE

State FFA Judging Contest Tuesday At University Of Illinois

URBANA--More than 1,000 Illinois FFA members from about 200 vocational agriculture departments are expected to compete in the state Future Farmers of America judging contest Tuesday, June 23 at the University of Illinois Livestock Pavilion.

Contest divisions to be judged Tuesday include livestock, dairy, poultry and grain. The meat and dairy products judging contests will be held in the same place this fall on Saturday, September 19.

Winners of the state livestock, poultry and meat judging contests will be eligible to compete in the national judging contests in October at Kansas City, Mo. Winners of the state dairy and dairy products judging contests may compete in the national dairy judging contests this fall at Waterloo, Ia. Grain judging contests end at the state level.

Any FFA member under 21 years of age with less than four years' training in an approved course in vocational agriculture is eligible to participate in the state judging contests. Boys may compete as individuals or as members of three-man teams.

Judging contests help to stimulate the vo-ag student's interest in learning the points of proper selection of livestock, poultry and grain. These contests enable the boys to put classroom instruction into practice.

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WDB:ml
6/16/64
NO

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

State 4-H Judging Contest Set For June 30 In Urbana

URBANA--Nearly 1,000 4-H'ers from 90 Illinois counties are expected to compete for "A" ratings in state 4-H Club judging contests in livestock, dairy, poultry and vegetables Tuesday, June 30, on the University of Illinois campus.

Bill Stone of the 4-H staff at the U. of I. points out that the state contest is a steppingstone to participation in national 4-H judging contests to be held later in the year in Chicago; Waterloo, Iowa; Kansas City, Mo.; and New Orleans, La.

All individuals who receive an "A" rating in the June 30 contest and who meet the interstate eligibility rules will have the opportunity to compete in invitational contests where final selection will be made for representatives of the four-member Illinois dairy, livestock, poultry and vegetable national judging contest teams.

Stone says the invitational contests for state contest "A" rating winners in dairy and livestock judging will be held during the Illinois State Fair in Springfield. Invitational contests for poultry and vegetable winners will be held at the University of Illinois.

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JEW:ml
6/19/64

FOR IMMEDIATE RELEASE

U. of I. Announces Illinois 600-Pound Butterfat Club

URBANA--A total of 1,726 registered cows and 1,188 grade cows met the requirements for the 1963 Illinois 600-Pound Butterfat Club, according to Jerry Cash, University of Illinois extension dairy scientist.

Cows tested in DHIA qualified for the exclusive club automatically if they produced 600 pounds or more of butterfat in a lactation period of 305 days or less that ended during the 1963 calendar year.

Dr. S. A. Dimiceli of Elgin owned the highest producing Ayrshire cow. His registered cow produced 23,300 pounds of milk and 1,063 pounds of butterfat.

Cash said the highest producing Brown Swiss was a registered cow owned by Thornton Mooberry and Son of Peoria. She produced 23,420 pounds of milk and 888 pounds of butterfat.

A registered Guernsey cow owned by Rosewood Farm, Roselle, led all cows of that breed with 15,070 pounds of milk and 998 pounds of butterfat.

The highest producing Holstein, a registered cow owned by Ivan Hill of Crystal Lake, produced 22,520 pounds of milk and 1,075 pounds of butterfat.

Ann Arbor Farm of Wadsworth owned the highest producing Jersey Their registered cow produced 18,810 pounds of milk and 988 pounds of butterfat.

Cash said 826 DHIA members had one or more cows that qualified for the 600-pound Butterfat Club. Two hundred seven members qualified five or more cows, and 63 qualified ten or more.

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Rosewood farm of Roselle led all herds in number of cows qualifying, with 40. Herds with more than 20 cows qualifying were Rolling Acres Farm, Elgin, 29; Fisk and Keys, Sycamore, 24; Moo Meadows Farm, Woodstock, 24; and C. C. Becker and Sons, Alhambra, 23.

The Illinois 500-Pound Butterfat Cow Club was organized 41 years ago to emphasize the important principles involved in obtaining a high and profitable level of production and to focus attention on the many high-producing cows and herds in the state. In keeping with progress, the program was changed to the Illinois 600-Pound Butterfat Cow Club on January 1, 1959.

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HDN:ml
6/19/64

FOR RELEASE MONDAY P.M., JUNE 22, 1964

UI Ag Engineer Reports New Feed Injector Design At National Meeting

FORT COLLINS, Colo.--Three manufacturers of automated feed-conveying systems for farms are licensed to manufacture a feed injector developed by a USDA agricultural engineer at the University of Illinois.

Hoyle B. Puckett of the USDA Agricultural Research Service described the device here today at the 57th annual meeting of the American Society of Agricultural Engineers.

Puckett and Herschel H. Klueter of ARS developed the auger-type injector in cooperation with the U. of I. Agricultural Experiment Station. It is a component of a feeding system that automatically grinds, mixes, conveys and distributes feed to livestock.

Puckett said that the medium-pressure pneumatic conveying system requires an air pressure of 3 to 20 pounds per square inch to move feed through the pipe.

Maintaining an air-tight seal where feed enters the pipe was a major engineering problem in adapting pneumatic systems to farm use, Puckett said. Industrial equipment uses a costly star-wheel air lock that needs frequent adjustment. Existing air locks using an auger would not maintain the air seal when the conveyor was not receiving a continuous supply of material.

The engineers designed an auger-type injector in which the feed creates its own air-tight seal. It never needs adjustment and costs only a third as much as the star-wheel air lock.

The injector consists of a single horizontal auger, 8 to 10 inches long, that moves the material into a tapered 90-degree elbow.

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The inside diameter of the elbow flares by one-half inch between its entrance and exit. When the conveyor is not running, pressure in the line forces the feed back against the sides of the tapered elbow, effectively sealing it.

The auger, operated with a two-horsepower hammermill, has an outside diameter of 2 1/2 inches and a pitch of 7/8 inch.

The auger injector developed by Puckett and Klueter has performed well for a year in a field test on a large poultry farm near Peoria. Nine auger injectors are now operating satisfactorily on farms.

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HDN:ml
6/19/64

FOR IMMEDIATE RELEASE

Illinois Vo-Ag Teachers
Elect Officers

URBANA--The Illinois Association of Vocational Agriculture Teachers (IAVAT) elected E. L. Rice, Princeville, association president during the annual conference for vo-ag teachers at the University of Illinois June 15-18.

Other newly elected officers include Melvin J. Nicol, Maroa, vice president; and district directors Leroy Lawrence, Lockport; and Charles Schettler, Wapella. Holdover officers are J. W. Berger, Charleston, secretary-treasurer; and district directors Clifford Sichta, Lanark; Frank Young, Washington; and John Baker, Bridgeport.

IAVAT activities began with executive committee meetings on Monday and included sessions during the vo-ag teachers conference on Tuesday, Wednesday and Thursday.

About 240 attended the IAVAT banquet Wednesday evening, June 17. The banquet speaker, Kenny McMillan, Bushnell, past national FFA president, urged the vo-ag teachers to use criticism of vo-ag constructively. He said, "We've got to use everything we've learned from the past to plan for the future."

The IAVAT recognized members for years of service by presenting 10-year men with lapel buttons, 20-year men with gold keys, 25-year men with plaques, 30-year men with watches, 35-year men with luggage and 40-year men with electric blankets. Vo-ag teachers honored from this area are: (See list on next page.)

The National Vocational Agriculture Teachers Association (NVATA) presented service awards to retiring vo-ag teachers Clarence Hanover, Warrensburg; Burl A. Hocking, Robinson; C. C. Lewis, Hampshire;

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M. G. Roberts, Genoa; Glenn Shippy, Plano; J. A. Twardock, Champaign; and K. E. Wehner, Rochelle. The NVATA also awarded "30-Minute Cards" to 13 vo-ag teachers who had written articles for magazines that were distributed in three or more states.

Illinois vo-ag teachers honored for years of service:

Ten-Year Men

George F. Brock	Brussels
Paul Chaney	Geneseo
J. Clark Esarey	Tolono
James Elliott	Wayne City
Victor Funk	Franklin
Ralph Goodman	Milford
Lawrence Gregory	Deland
Harold Hall	Farina
Clark Heuer	Toluca
Lester B. Hilden	Winnebago
William Holak	Lena
John Hughes	Illiopolis
Steve Pollock	Albion
Harold Vale	Durand
Glenn Wiley	Wenona (9½)

Twenty-Year Men

J. W. Berger	Charleston
E. L. Bosomworth	Bethany
Donald Boyer	Casey
Sherwood Jackson	Seneca
Russell Inman	Ullin
O. C. Floyd	State Supervisor
Delmer Launius	St. Jacob
William G. Marshall	St. Charles
Fred Morris	Mendota
E. L. Rice	Princeville (19½)
W. T. Spittler	Marshall
Stanley Walker	Media

Twenty-Five-Year Men

James Bond	Galatia
G. R. Brown	Lostant (24½)
William Lubben	Gilman
Homer Heape	Murphysboro
Joseph McGann	Danvers
A. W. Schmidt	Hebron
Chester Seibert	Edwardsville
Frank Young	Washington

Thirty-Year Men

Phillip E. Gill	Carlyle
Roy Hefty	Orangeville
Melvin J. Nicol	Maroa
Clifton E. Wick	Pearl City

Thirty-Five-Year Men

M. G. Roberts	Genoa

Forty-Year Men

Keith Wehner	Rochelle

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WDB:ml
6/19/64
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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Research Shows Bicarbonate Boosts Milk Fat In High-Concentrate Rations

URBANA--As the production level of dairy cows increases, the need for more concentrated, high-energy rations is inevitable.

This calls for higher levels of grain feeding. And, as the old phrase goes, "There's the rub." High-grain, restricted-roughage feeding results in the long-known, poorly understood phenomenon of low-fat milk.

The reason for the low-fat problem is still not fully understood. However, University of Illinois dairy scientists have shown that it can be prevented by adding bicarbonate to the ration at a rate of 1/2 to 1 pound per day. The U. of I. research also strongly suggests that bicarbonate feeding will correct a low-fat milk once it has occurred.

Dairy researcher Carl Davis says the Illinois study supports previous findings which indicate that the low-fat problem is tied in with a reduction of saliva output in cows fed a low-roughage ration.

A cow fed normal amounts of roughage will produce about 120 pounds of saliva per day. Under a high-grain, low-roughage ration, this total is slashed to about 60 pounds per day.

Since saliva acts as a buffering agent, rumen propionic acid content increases as saliva flow into the rumen decreases. The higher than normal levels of propionic acid work against milk fat synthesis.

Adding bicarbonate in sufficient quantity compensates for the reduced saliva output and creates a condition within the rumen similar to that found when normal rations are fed.

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The first U. of I. research with high-concentrate rations involved 12 Holstein cows. During the first two weeks of the study, half of the cows received free-choice alfalfa hay and grain. The other six cows were fed as much grain as they would eat (about 33 pounds daily) and alfalfa hay at the rate of five pounds per day.

After two weeks, milk fat content was 3.51 percent for cows receiving as much hay as they wanted, compared with only 1.70 percent for cows getting five pounds of hay.

U. of I. researchers then broke the high-roughage cow group into two sub-groups. Hay consumption for both sub-groups was dropped to five pounds daily, with one group receiving one pound of sodium bicarbonate per day.

The group fed sodium bicarbonate maintained a butterfat production of 3.22 percent. Milk fat content dropped to 1.74 percent for the cows receiving no bicarbonate.

Davis points out that Brown Swiss cows used in a later study refused to eat grain with bicarbonate added at a level of one pound per day. When researchers dropped the bicarbonate level to one-half pound daily, cows ate the grain and showed a significantly higher fat test than cows not receiving bicarbonate. However, the fat test was somewhat lower--4.1 percent as compared with 4.3 percent for cows on a normal ration.

Davis points out that the U. of I. studies do not explain the basic cause for low-fat milk production from cows fed a high-concentrate diet. Work to date merely provides further evidence that the rumen acids are involved.

A recent $40,000 USDA grant will enable U. of I. researchers to probe even deeper into the phenomenon during the next two years.

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6/22/64

FOR IMMEDIATE RELEASE

U. of I. Dairy Researchers Test Silage From Mature Corn

TUCSON, ARIZONA--Silage made from mature corn chopped and ensiled on November 11 showed promise for extending the dairy roughage supply in recent University of Illinois tests.

U. of I. dairy cows ate 16.6 pounds daily of the experimental silage compared with 16.1 pounds daily of conventional silage which was ensiled on September 27. Dry matter content at harvest time was 31.5 percent for the control silage and 54.9 percent for the experimental silage.

Digestion trials showed the regular silage to be superior to the "mature" silage in dry matter and protein digestibility. Cows fed the mature silage maintained milk production as well as cows on the control silage.

Reporting the research this week at the annual meeting of the American Dairy Science Association, U. of I. researchers J. H. Byers and E. E. Ormiston emphasized that results of the test were based on a limited study which was aimed at getting a preliminary check of mature corn silage feeding potential.

However, the results were good enough to warrant a full-scale study this fall and winter. Byers noted that making silage at the normal time and then refilling the silo with mature corn in late November or early December could extend the dairyman's hay supply considerably.

In the U. of I. tests, the control silage yielded 13,985 pounds of dry matter per acre compared with 13,411 pounds for the experimental silage.

Byers said the 574 pounds of dry matter lost in the mature corn probably was due to the number of leaves lost and the amount of "downed" stalks that the forage chopper couldn't pick up.

Further work is planned with the experimental forage this fall. U. of I. researchers will test silage cut at four different stages of maturity.

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6/22/64

FOR IMMEDIATE RELEASE

Sweetening Agents Improve Calf Starter Consumption In UI Early Weaning Study

URBANA--University of Illinois dairy researchers recently demonstrated that early weaning at 28 to 35 days could chop $4.75 off the cost of growing a calf to 12 weeks of age.

Now U. of I. research shows that dairymen can improve early weaning rations even more by adding a sweetening agent which promotes early consumption of dry feed--the critical hurdle in any early-weaning program.

Dairy researcher Ken Harshbarger said molasses, dextrose or sucrose added at a rate of eight percent proved about equal in boosting the palatability of calf starter rations.

During the 12-week test, calves ate 211 pounds of sweetened ration compared with 182 pounds of non-sweetened starter. Calves on sweetened rations were fed 248 pounds of milk. Calves on regular received 252 pounds.

Average daily gain was 1.46 pounds per day for calves on sweetened starters and 1.33 pounds daily for calves on regular starter rations.

Total feed cost at 12 weeks of age was $17.04 for sweetened rations and $16.29 for the regular starter. This broke down to an average feed cost per pound of gain of about 14 cents for the sweetened ration compared with 14.7 cents for calves on the control ration.

Harshbarger cited the earlier U. of I. study in which calves were weaned at 28 days after consuming about 220 pounds of whole milk. Calves in a control group were weaned at 56 days after consuming nearly 360 pounds of milk.

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The only difference between the two groups at the end of the test was the higher feed costs (up $4.75) for the calves weaned at 56 days. The research showed no significant differences in total gain, heart girth size, height at wither or feed intake.

In more recent tests, calves weaned at 56 days made an average daily gain of 1.38 pounds at a feed cost of 18 cents per pound of gain. Total feed cost to 56 days was $21.04. The starter ration in this test was sweetened with molasses.

Harshbarger explained that U. of I. milk feeding schedules for early weaned calves are based on calf birth weights rather than on dairy breed.

The Illinois researchers believe the variation in birth weights of calves within breeds is large enough to justify a flexible milk feeding schedule for each calf.

The U. of I. milk feeding schedule provides daily milk consumption at the rate of 8, 9, 10, 9 and 5 percent of the birth weight in the first, second, third, fourth, and fifth weeks respectively.

Harshbarger pointed out that, even though most calves can be weaned at four weeks of age, it's best to feed a small amount of milk during the fifth week to help them make a smooth transition from milk to dry feeds.

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6/22/64

FOR IMMEDIATE RELEASE

Illinois DHIA Herds Set New Production Records

URBANA--Illinois dairy herds enrolled in the Dairy Herd Improvement Association shattered previous production records in the official record-keeping year ending in April.

University of Illinois extension dairy scientist Gary Harpestad said the 1,464 DHIA herds completing 12 months on test in April averaged 11,799 pounds of milk and 451 pounds of butterfat per cow during the year. This is an increase of 669 pounds of milk and 20 pounds of butterfat over last year--the largest one-year increase in Illinois DHIA history.

The production boost was accompanied by a 21-dollar increase in feed cost per cow. Because of higher feed prices, the returns over feed cost increased only one dollar over last year.

Harpestad said almost one-fourth of all Illinois herds completing 12 months on test in DHIA averaged 500 or more pounds of butterfat per cow in the year ending in April. A total of 330 herds, or 22.5 percent of the 1,464 herds, reached the 500-pound production level.

The top-producing herd in both milk and butterfat was also the top Holstein herd in the state, owned by Arthur Bruens of Cissna Park. The Bruens herd of registered Holsteins averaged 17,727 pounds of milk and 662 pounds of fat. The herd averaged 37.4 cow years.

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The highest producing Guernsey herd was owned by Leslie Bateman of Mansfield. This registered Guernsey herd consisted of 46.0 cow-years and averaged 11,195 pounds of milk and 617 pounds of butterfat.

Frank McDonald of Princeton had the high Ayrshire herd. His registered herd consisted of 26.6 cow-years and averaged 12,860 pounds of milk and 531 pounds of butterfat.

Clarence Becker of Alhambra is the owner of the state's top Brown Swiss herd. His herd averaged 14,720 pounds of milk and 591 pounds of butterfat. The herd was made up of 78.0 cow-years.

The top Jersey herd was owned by Hadley Brothers of Cambridge. Their registered Jersey herd consisted of 39.4 cow-years and averaged 10,937 pounds of milk and 582 pounds of butterfat per cow for the year.

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HDN:ml
6/26/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

University Of Illinois Research Briefs

University of Illinois dairy biochemists are continuing their probe into the secrets of milk production. To carry out the work, they remove mammary gland tissue cells from dairy cow udders and transplant them into small laboratory flasks. Some cells have lived and reproduced in the flasks for nearly three years.

For a short time the test tube cells continue to make milk. After a few days, however, they lose this ability even though they continue to grow and organize as if they were still in the cow.

The U. of I. researchers are using the test tube cells to study processes that control formation of milk in the mammary gland. They hope that this research may ultimately unlock enough secrets to explain how milk is produced within the cells.

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The effects of pesticides on animal cells are also under study in the U. of I. dairy department. First experiments will be with bull sperm cells (primarily because there is no division in these cells). Later studies may concern cells of the mammary glands and kidney.

This is one of the few on-going studies that brings the investigation of pesticide effects down to a cellular level. The U. of I. scientists will work to discover the effects of pesticides on cellular metabolism.

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Results with silage made from mature corn chopped and ensiled last November 11 were good enough to warrant a full-scale U. of I. study this fall and winter.

Dairy scientists point out that making silage at the normal time and then refilling the silo with mature corn in late November or early December could extend the dairyman's hay supply considerably. This fall researchers will test silage cut at four different stages of maturity.

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A synthetic lysine suitable for food supplementation is the objective of another U. of I. dairy biochemistry research study. Lysine is an essential amino acid that must be supplied by the diet of all higher animals, including man. However, the valuable amino acid makes up only a small part of some common vegetable proteins. This makes the lysine problem a critical one, since perhaps two-thirds of the world's population exist on predominantly vegetable diets.

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Why can some bacteria that limit milk storage life grow at refrigerator temperatures?

The answer to this question is a goal of U. of I. dairy technology researchers. They have undertaken a comparative study of bacterial "twins," identical in almost all respects except temperature of growth. The researchers hope that this study will find the factor or factors that enable the bacteria to resist cold.

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6/30/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Space Available At U. Of I. Family Camps

URBANA--Mothers can anticipate a refreshing "break" from their everyday routine at six University-of-Illinois-sponsored family camps that will be held throughout the state during July and August.

Yet dads and kids will enjoy themselves, too, says Karl Munson, U. of I. extension recreationist.

Munson explains that the camps are open to any family interested in nature, camping, recreation and crafts. Weekend camps are scheduled for Western Illinois 4-H Camp, Jacksonville, July 10-12, July 24-26 and August 7-9. Another weekender will be held at Shaw-waw-nas-see 4-H Camp, Kankakee, August 21-23.

Five-day camps will operate at Southern Illinois 4-H Camp, West Frankfort, from July 26 to 31 and at 4-H Memorial Camp, Monticello, from August 17 to 21.

Munson explains that the camps give families a chance to become acquainted with other families in an organized camping setup. Campers can participate in many forms of recreation, including crafts, cookouts, nature games, waterfront activities, music and drama.

Some cabin space is available at each camp site. Each family lives in a private cabin. However, there is also limited space for tents or trailers for those who wish to bring their own housing.

Families share the responsibilities for the camping program. For example, each family takes a turn at evensong and flag ceremonies.

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Costs per adult camper (10 years and older) range from $7.50 for the weekend camp to $20 for the five-day camp. Costs for children under 10 years are less. The weekend camp includes six meals; the five-day camp, 13 or 15 meals.

The family camps are sponsored by the University of Illinois Cooperative Extension Service as a part of the rural recreation and family life programs.

For more information about these family camps, consult your county farm or home adviser. Or write to Clareta Walker, Extension Family Life Specialist, 569 Bevier Hall, University of Illinois, Urbana, Illinois.

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JEW:ml
7/6/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Cooperation Of Weatherman Needed For Good Corn Crop

URBANA--Research has made folly of the old corn adage "knee high by the Fourth of July." This year the corn was "eye high" or higher--but Illinois farmers will still need an assist from the weatherman before they can expect to equal or better last year's record-breaking harvest, says University of Illinois agronomist Ed Runge.

How much help is needed? The agronomist says that two inches of rain above that normally received during the critical tasseling period, when the corn "silks" and sheds pollen, could mean eight bushels more per acre to Illinois farmers. But average rainfall for this period--July 15 to 31--is only 1.3 inches.

The seven days before and the seven days after pollen shedding have the greatest effect on corn yields. The next most critical time is the ear-filling period, two weeks after pollen shedding. An inch of rain above the 1.7 average then could raise yields by another 3.6 bushels per acre.

Rain affects corn yields less when it comes 15 days and a month before pollen shedding than at and after pollen shedding. An inch more rain than average at these later periods boosts yields by 2.9 and 1.5 bushels respectively. Research shows that additional rain during other periods of the plant's development apparently doesn't directly affect yields.

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But, contrary to popular opinion, Illinois farmers can do something to get the right weather at the right time. They can plant corn early enough to make sure that plants are past the critical stages when the odds for moisture are lowest. In central Illinois, this time is usually during the last two weeks of July.

Early planting means getting the crop in as soon as possible after the soil has warmed to 55 degrees. Adequate weed and insect control plus early planting of long-term--full-season--varieties increases the likelihood of above-average yields.

Temperature and moisture usually go hand in hand. Favorable moisture and below-average temperatures increase yields. But moisture shortages, coupled with higher-than-average temperatures, mean lighter crops.

Once corn gets 20 inches tall, cooler and wetter-than-average weather is the "recipe" for bumper crops. A repeat performance of last year's ideal corn weather would greatly enhance yields this season, says Runge.

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JJF:ml
7/10/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Note to Editor: Story of primary interest to northern Illinois.

Eliminate Corn Cultivation? DeKalb Research Hints

URBANA--Two years' results at the University of Illinois DeKalb Research Center show that the only possible advantage of cultivation is to control weeds and break badly crusted, low-organic soils, reported U. of I. agronomist Tom Hinesly at the annual DeKalb Field Day.

Hinesly used three different cultivation systems: three cultivations, three cultivations plus atrazine, and atrazine without cultivation. So far the cultivated plots and those treated with atrazine have yielded about the same, he reported.

This year smut has appeared in oat fields, reported plant pathologist Wayne Bever. Seed treatment will control it, he said. Very little yellow dwarf virus, leaf rust or stem rust has appeared. Recent storms in northern Illinois produced some freak damage where lightning struck soybeans. However, ragged leaves on soybeans may be caused by bacterial blight rather than hail. Bever pointed out that soybeans resistant to Phytophthora rot may not be immune to other diseases. Soybean varieties with the "63" suffix, such as Harosoy '63, are resistant to Phytophthora rot. Where the disease is severe, resistant varieties mean the difference between a crop and a failure.

DeKalb Center manager Dick Bell reported on the time of planting as it affects early-, medium- and late-maturing corn varieties. Some farmers have shown interest in early varieties for lower moisture corn harvested by picker-shellers. In DeKalb studies, full-season varieties have yielded well when planted from May 2 to June 3.

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In his "shoot the moon" efforts for higher profits from oats, agronomist Bill Pardee emphasized removing oats early while they were still palatable and food value was highest. In the DeKalb experiment, he used a tall, late, stiff-strawed oat variety. It appears that 50 pounds of nitrogen per acre and five bushels of oats are the most economical rates, he reported.

A little care and attention makes the difference in oat yields, advised oat breeder Charles Brown. Many of the varieties at the center have averaged over 100 bushels per acre for the past three years. Fall-plowing, adding 30 pounds of nitrogen in the spring plus a little phosphate, and drilling help to establish oats and pay off in better yields, said Brown.

Wheat breeder Roland Weibel is "looking hard" at Gage wheat. The Nebraska-released variety has performed well under test. It has good stem rust and soil-borne disease resistance. Ottawa and Omaha, recently added to the recommended list, have better sedimentation tests than Ponca and Pawnee.

Northern Illinois is the only area where farmers should try spring barley and spring wheat. Even in this area these crops must be planted early, advised agronomist W. O. Scott. Trophy and Larker barleys have outyielded and stood better than Kindred. But scab continues to be a problem on most barleys. The DeKalb area is too far north for winter barleys; they'll fail in eight of 10 winters, said Scott. His advice: "Stick with spring oats and winter wheat."

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7/10/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Agriculture At The Crossroads

URBANA--American agriculture is faced with a choice: remain traditional in make-up or take on the characteristics of industry.

Farm production methods are much like the production methods used in industry. But the question now is whether agricultural institutions--that is, the ways in which agriculture is organized and managed--will go the same route.

Agricultural institutions may well drift into industrial forms unless specific action is taken, says Harold F. Breimyer, USDA economist and visiting professor of agricultural economics at the University of Illinois.

Writing in the summer issue of Illinois Agricultural Economics, Breimyer points out that agriculture could move down two paths to complete industrialization--horizontal combination of small farms into corporation-style organizations, or super farms; or vertical integration, in which farmers transfer much of their managerial authority to processing and marketing firms.

If U. S. agriculture is to keep its traditional make-up of independent units, Breimyer says it will have to utilize existing institutions for that purpose, or even form some new ones.

The direction agriculture takes will not be decided on economic grounds as much as on other bases. To a large extent, he explains, decisions will be based on what kind of agriculture and rural life is desired for its own sake.

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Any of several forms of agricultural organization would provide adequately, though not equally, for the food and fiber needs of our consuming population. Few research data are to be found on whether a different kind of agriculture would be more productive than the traditional kind.

If the public decides to keep traditional agriculture rather than change to an agriculture organized along industrial lines, several courses of action are available. Some are private, while others would require enabling authority or direct help from the government.

Examples of action that could influence the direction agricultural institutions will take include the following, either singly or in combination:

1. Stepped-up educational services to farmers.
2. Better sources of financial capital available to farmers.
3. New arrangements for farm ownership and tenure.
4. New or enhanced forms of farmer cooperation.
5. Cooperative marketing under orders and agreements.
6. Cooperative bargaining associations.
7. Legal aids of various kinds, including protective legislation.

Breimyer emphasizes that these seven examples do not exhaust the possible means of achieving whatever the democratic decision-making process determines to be the desired makeup of U. S. agriculture. These examples are the ones most often proposed by farm leaders and farm economists who have studied the nature and meaning of the forces born of industry that are now pressing upon the traditional agriculture of the United States.

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WDB:ml
7/14/64

FOR IMMEDIATE RELEASE

Joliet Junior College To Offer Ag Career Training

URBANA--One of the first vocational training programs designed to prepare workers for non-farm agricultural careers begins this fall at Joliet Junior College.

Joliet, the oldest junior college in the United States, will offer a two-year agricultural supply curriculum to train students for specific jobs in agricultural supply businesses. Max Kuster, head of the agriculture department at Joliet, says the curriculum is a pilot program of a new type that is encouraged by the Vocational Education Act of 1963.

The two-year program will provide three semesters of college courses on the Joliet campus. During the fourth semester, the students will be placed in agricultural supply businesses for on-the-job supervised training. Thus they are practically assured of jobs upon graduation.

Graduates of the special two-year course will be trained as semi-professional workers to sell agricultural supplies, provide services to farmers regarding the proper use of farm supplies and operate and manage agricultural businesses.

Kuster emphasizes that Joliet's agricultural supply training will enable rural youth to capitalize on their agricultural background. However, the training is not limited to youth--men and women of any age may apply for admission. Even a high school diploma is not necessary, but the applicants must pass the college entrance examinations.

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Students will be admitted to the new program from all parts of the state. Those from outside the Joliet area will pay $150 tuition per semester. Other costs include board, room, textbooks and supplies. Kuster will try to place some boys on nearby farms if they wish to work for their board and room.

Opportunities for employment in agricultural supply businesses look very promising. A spokesman for a large farm supply firm in Illinois said that his company could hire all the graduates of the new program "for the next ten years." His company employs about 3,000 persons, with an annual turnover of about 300 employees.

Reporting on a job-opportunities study in 14 eastern Illinois counties, Lloyd Phipps, University of Illinois professor of agricultural education estimates that about 1,854 persons will be needed in the next twelve months for jobs requiring post-high-school education in agriculture. These job opportunities in non-farm agricultural businesses will be due to both business growth and employee turnover, Phipps said.

Dean Louis B. Howard of the University of Illinois College of Agriculture recently called for "an educational revolution in rural areas." He emphasized the great need for more rural young people to attend college or to obtain advanced vocational training.

However, college doors have slammed shut for would-be freshmen who were not admitted early in the year. The five state-supported universities are full.

The situation is even worse for rural young people desiring the advanced vocational training suggested by Dean Howard. Advanced vocational training beyond high school but below college level has not been available in agriculture.

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To help eliminate the educational void between high school and college, the Joliet Junior College developed this pilot program to prepare people to work in agricultural supply businesses. Joliet developed the program in cooperation with the State Board of Vocational Education and the University of Illinois Agricultural Education Division.

Persons interested in training for a career in an agricultural supply business can get more information from Joliet Junior College, Joliet, Illinois. Last date for admission is August 15.

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7/14/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

National Farm Safety Week July 19-25

Constant efforts are being made to get farm folks to work and live safely. Yet across the nation, accidents continue to kill 8,700 and injure 800,000 farm residents yearly.

The dollar cost? $1.5 billion. Farm folks just can't afford this loss.

This is why the week of July 19 to 25 has been set aside as National Farm Safety Week. The theme is "Safer American Families Everywhere."

National Farm Safety Week is a major nationwide cooperative drive to help focus attention on the lurking dangers that surround farm residents. The safety drive is spearheaded by the National Safety Council and the U. S. Department of Agriculture, along with state safety councils and thousands of local workers.

Laws and regulations help to some extent, but the main responsibility for preventing serious farm accidents must be placed on the individual, emphasizes O. L. Hogsett, extension safety specialist, University of Illinois College of Agriculture.

Modern farmers' tools of production involve machines, electricity and chemicals. Hogsett urges farmers, "Don't get so familiar with these modern helpers that you grow careless about operating and using them safely."

It's important to take the fear out of farming by practicing safety throughout the year rather than splurging in July and then ignoring the dangers the rest of the year, the safety specialist concludes.

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FOR IMMEDIATE RELEASE

New Dairy Barn Designed For Production And Protection

A new 40-stall dairy barn design provides double use--for milk production and for emergency protection from radioactive fallout for the farm family and their dairy herd.

D. G. Jedele, University of Illinois extension agricultural engineer, explains why the barn is good for fallout protection.

Used daily, the barn is a familiar environment in case of an emergency. It combines the family shelter and the dairy barn under the same roof. The dairyman can safely care for his stock.

The barn has power equipment for operating without outside help. The building has excellent overall fallout protection--a factor of 80 to 110 in the dairy barn and over 250 in the family shelter. The design of the family area reduces the radiation to less than half that for the rest of the structure.

The barn is permanently built. It will keep its strength and protective efficiency. Sand is piled 2 feet deep on the roof for overhead shielding.

The barn plan is designed to shelter 40 cows and 6 people. Air is provided by multispeed ventilation fans delivering 4,000 to 16,000 cubic feet of air per minute, depending on the temperature. Standby power within the barn is desirable.

Water supply facilities are also included within the structure. The water pump, vacuum pump and standby generator can be serviced without leaving the building.

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Manure, which accumulates at the rate of 3/4 to 1-1/4 cubic feet per day per cow, can be piled near the main door if it cannot be removed mechanically. This places the pile directly under the exhaust fan to carry away odors and fumes.

Since the barn has no windows, one watt of incandescent lighting per square foot is needed. The size of the standby generator required depends on the other demands.

Gasoline is stored in an underground tank outside the utility room. Exhaust fumes from the standby generator motor and air from the compressor are vented to the outside.

The main door of this design is 6 feet wide and admits 30 percent of the radiation passing to the center of the dairy barn. Baled hay stacked in a pile 6 feet wide against the door and soaked with water reduces the radiation passing through the blocked door to only 1/43 of the radiation passing through the normal door. The blocked door admits only 1 percent of the radiation passing to the center of the dairy barn. Stacked bales increase the protection factor from about 80 to 110.

You can get working drawings for this barn from the Department of Agricultural Engineering, University of Illinois, Urbana, for $1.25. Ask for plan No. 5937.

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7/17/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

ADVANCE FOR RELEASE AT 10:00 A.M. WEDNESDAY, AUGUST 5, 1964

UI Ag Economist Says U. S. Surpluses Cannot Feed World's Hungry

MONTICELLO--A University of Illinois agricultural economist today called the idea that the United States could feed the world's hungry with its surpluses "a fallacious and dangerous dream."

Speaking before the 13th annual International Farm Youth Exchange Alumni Conference at the State 4-H Memorial Camp near here, economist L. H. Simerl said many people have been misled by distorted statements about the great productivity of U. S. agriculture.

"There is no doubt that the American farmer is highly efficient," Simerl said. "But agricultural output in the United States has just barely kept pace with population growth during the past half century."

Simerl said present U. S. surpluses in a few products are the consequences of price support activities--not the normal result of any unusual increase in farm output.

"Over the past 50 years, U. S. farm output increased only three percent more than population," Simerl said. "All of that gain was made in 1941-42. Over the past 20 years, U. S. farm output gained three percent less than the nation's population."

Simerl said estimates of world food production show that it also has increased less rapidly than population in recent years.

"World population grows 50 million a year," he explained. "It is as if a new nation the size of the United States appeared every four years--with no farms or land to feed it."

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Simerl noted that some agricultural scientists believe they now have sufficient knowledge to provide adequate nutrition for the present world population, and even double or quadruple that number.

"But scientists with knowledge produce very little food," he emphasized. "Most of the world's daily food supply is produced by hundreds of millions of farmers with little or no knowledge of scientific agriculture. Instead, they are held back by customs, religious beliefs, lack of capital, poor health and inefficient economic institutions."

Simerl outlined other challenges that he considered the most critical economic problems of today. These included adequate education for youth, satisfying employment for workers and soil, water and mineral resources for the future.

But he called the problem of feeding the hungry and upgrading diets the most challenging problem of our time.

"It is not a race to be won or lost," Simerl said. "It is rather a problem of achieving a tolerable balance between a growing population and an expanding food supply. By the year 2,000, a little more than one generation away, about six billion people will inhabit the earth. That's about twice as many as we now are unable to feed adequately."

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7/31/64

FROM PUBLIC INFORMATION OFFICE
University of Illinois

ADVANCE FOR RELEASE AT
1:30 P.M. TUESDAY, AUGUST 4, 1964
Mailed

(ADVANCE FOR RELEASE AT 1:30 P.M. TUESDAY, AUGUST 4, 1964.)

MONTICELLO, Ill.--The rest of the world is going its own way despite efforts of the superpowers--the U. S. and the U.S.S.R.--to command the destiny of mankind, a University of Illinois historian said today.

Prof. Norman A. Graebner analyzed changing global politics before the 13th annual International Farm Youth Exchange Alumni Conference being held at the State 4-H Memorial Camp at Allerton Park, U. of I. conference center near here.

Some 200 young farm people, men and women who have gone abroad in the international exchange program, gathered from all over the nation to attend the sessions, which began Monday night and continue through Thursday.

"The course of world politics in the cold war, while not always responding to American will, has not served the Russian purpose either," Graebner said. "The world's political future seems to respond less and less to the intentions of both the world's great superpowers.

"Nationalism has proved an effective deterrent against the political and ideological assault of the Soviet world. Asian and African socialism represents less an ideological commitment than a normal reaction to economic conditions.

"What is resulting resembles the Soviet economic structure no more than it does the free enterprise system of the United States, for both American capitalism and Soviet communism respond to conditions so unique as to make both inapplicable to any other region of the world."

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FOR IMMEDIATE RELEASE

Dixon Springs Tomatoes Break 100-Ton Yield Barrier

DIXON SPRINGS--The "magic figure" in greenhouse tomato production is 100 tons per acre. Producers doing a good job can reach the 100-ton barrier with a spring and fall crop. But this year a single spring crop grown in a Mylar-covered house produced the equivalent of 104 tons per acre, reports horticulturist Bill Courter of the University of Illinois Dixon Springs Agricultural Center.

Courter made the barrier-breaking yield with two greenhouse tomato varieties that have been consistently high yielders, Michigan-Ohio Hybrid and Ohio WR-7. All tomatoes in the 104-ton yield were marketable, and about 70 percent graded U. S. No. 1.

Courter is also enthusiastic about a Purdue experimental variety, No. P-115. This variety yields extremely well for spring crops. This year it made the equivalent of 100 tons per acre, and more than 85 percent graded U. S. No. 1. Seed of this variety will be released this year, says Courter.

Nearly all of the eight greenhouse tomato varieties at Dixon Springs yielded well this year. Most of them produced over 90 tons. Courter says that growing conditions--especially sunlight--were excellent for tomatoes planted in early February and harvested from April to July.

To make the magic 100 tons, each plant spaced at 4.5 square feet must yield about 20 pounds of tomatoes. With most varieties this means that each plant must yield 10 to 11 clusters, with four or five tomatoes on each cluster. Proper pollination plays an important role in such yields. Courter helped pollination by shaking the flower with an electric vibrator four or five times a week.

The variety studies at Dixon Springs are made in semipermanent greenhouses built with funds furnished by the Area Redevelopment Administration.

Courter has plans for a 10' by 10' home greenhouse that might interest hobby gardeners. For information, write the Dixon Springs Agricultural Center, Simpson, Illinois.

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7/30/64

FOR IMMEDIATE RELEASE

"Food For Peace" Program Puts Farm Surplus To Work

URBANA--This year marks the 10th anniversary of Public Law 480, now called the "Food for Peace" program. Under this program, surplus U. S. farm products have been sent all over the world, not only to feed hungry people, but also to help in such varied projects as building schools in India, harnessing rivers in Colombia and providing agricultural and technical advisers to developing African nations.

No matter what PL 480 is called, its accomplishments during the first decade make it one of the most widely acclaimed and generally respected of our agricultural programs, according to University of Illinois agricultural policy specialist Robert G. Spitze.

PL 480 is both a farm and a non-farm program, Spitze explains. As a farm program, it has helped find outlets for excess farm products valued at $11 billion during the past 10 years. Farm products have been transferred to countries that could use them.

"As a non-farm program, PL 480 has improved our relations with other countries, "Spitze points out. "U. S. exports have gradually increased during the past 10 years. There is reason to believe that this program was one of the causes for growth in foreign markets."

In addition, the program is intended to assist countries that are trying to develop and increase their income. Many countries that have cooperated with the U. S. under PL 480 have moved from a relief status to good dollar markets. These countries include West Germany, Japan, Israel, Italy and Greece.

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In other less developed countries, the effects of PL 480 are seen in the completion of such projects as roads, irrigation systems, agricultural experiment stations and factories.

Spitze points out that the program operates in five different ways. Two of them involve outright gifts. Surplus foods are given either as disaster relief donations or through voluntary domestic and international organizations to needy people throughout the world.

"Then we can use PL 480 in two other ways to get something directly in return," Spitze explains. "We can barter our farm products for needed strategic materials from abroad. Or, under a recently inaugurated long-term loan program, we can get paid for the products over a 20-year period."

Spitze believes the fifth and most important use of PL 480 is to sell our farm products and receive payment in the cooperating country's currency. The currency is kept in the country and used for such things as market development, some U. S. economic and military assistance and other development projects.

In this way we get something we want in these countries now, and at the same time they get some of the development they want," Spitze points out. "We simply lend some of this money back to the country for their own projects. Future repayments will tend to maintain a revolving fund that is owned by the United States, but that can be spent only in that country. Or the United States can give the money as outright grants."

However, Spitze observes that there could be drawbacks to the use of PL 480. For example, the program could make the receiving countries dependent upon us for food. It could also result in deterioration of goodwill in other countries that are trying to sell their own agricultural products on the world market.

Finally, the program costs the U. S. taxpayers money. Currently about one-fourth of the U. S. Department of Agriculture budget is used under PL 480. Spitze points out that we want to be sure this way of using our funds is most effectively serving the interests of our own farmers and of all citizens in U. S. foreign programs.

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NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE TUESDAY, AUGUST 18, 1964

Economist Expects Firm Soybean Market

KANSAS CITY, Mo.--The price-support loan level and government resale structure will be the major factors affecting soybean prices during the coming year, a University of Illinois agricultural economist said today.

T. A. Hieronymus forecast that farm soybean prices would remain about five cents below the loan level, or about $2.32 per bushel, at Illinois points if the crop materializes as expected on August 1. He expects the price to dip below this level during harvest time. But prices may climb to slightly above loan level next March and April.

Speaking here before the annual meeting of the American Soybean Association, the economist estimated the current crop at 748 million bushels. With the expected carryover of 60 million bushels, the total prospective supply will exceed 800 million bushels.

"That is more soybeans than we can use up or get rid of at prices above the loan," Hieronymus said. He explained that domestic use and exports of soybeans would be up slightly from last year. Domestic use will account for about 435 million bushels, while exports will set a new high record of about 205 million bushels.

Good demand for soybeans for feed is anticipated, since more cattle are on feed and hog numbers are likely to increase. However, the market for soybeans for feed will depend on keeping prices at moderate levels.

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Citing the example of last year, Hieronymus reminded the group that soybean use decreased in one of the first years when supplies were adequate. "This happened because soybeans were overpriced last year. There was too much holding of soybeans, they were held too long and prices got too high at a time when hog prices were weak and cattle prices declining. You can price things out of use," he warned.

This year's export picture is bright. The sharp upward trend in exports, which started 13 years ago when we exported only 17 million bushels, will probably continue. A record-setting 187 million bushels of last year's soybean crop was exported. This includes large quantities of soybean meal and from 12 to 14 percent of the total soybean oil production.

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8/14/64

FOR IMMEDIATE RELEASE

Farmers Warned To Watch For Dangerous Gases In Newly Filled Silos

URBANA--Silo-filling this year could be a deadly task, warns O. L. Hogsett, University of Illinois extension safety specialist.

Hogsett explains that the dry weather this summer and high nitrogen fertilization could produce quantities of deadly poisonous nitrogen dioxide gas in newly filled silos. This gas is usually the cause of the so-called silo-filler's disease. Checks during silo-filling have detected nitrogen dioxide gas in more than four of 10 silos this year.

Here's what causes the gas:

Where plants grow under adverse weather conditions, such as this summer's prolonged drought, nitrates accumulate in the stems and leaves. After ensiling, oxygen is used up in fermentation and the nitrates are released as non-lethal nitric oxide, which in turn forms lethal nitrogen dioxide. It has an odor similar to that of some laundry bleaches.

Since nitrogen dioxide is heavier than air, it settles in the partly filled silo below the door opening, and may accumulate at the base of the chute. If a person or animal inhales the gas, it changes to highly corrosive nitric acid in the moist lung tissues. Permanent, and often fatal, lung damage results. Death is usually caused by pneumonia.

However, you can make silage safely. Hogsett recommends taking these safety precautions while filling silos and for the first two weeks after completing the job:

1. Run the blower for 15 to 20 minutes before re-entering a partly filled silo. Ventilate the chute to remove concentrations of gas. Remove chute doors down to the level of settled silage to prevent accumulation of gas.

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2. Never go into the silo alone during the danger period.

3. Be on the alert for bleach-like odors and yellowish-brown fumes in or near the silo. If you find either, get away from the silo--breathing the gas in even small quantities may damage your lungs.

4. Ventilate the silo room for at least two weeks after filling. Open outside doors and windows to carry away fumes. Keep the door between the barn and silo room closed to prevent the gas from killing livestock.

5. Stay out of and away from the silo immediately after filling and especially the following day. Barricade enclosed silo areas to prevent children, strangers and livestock from entering the silo room and silo.

6. If you experience the slightest throat irritation or coughing in the silo, get into fresh air immediately. See your doctor immediately after exposure to silage gas. Treatment will prevent lung damage and keep pneumonia from developing later.

For more information on ensiling drought-stricken corn, see your county farm adviser.

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8/14/64

FOR RELEASE MONDAY, AUGUST 17, 1964

Economist Sees Increasing Need For Finance-Managing Skills

LAFAYETTE, Ind.--The farmer of the future needs to develop managerial skills in finance as well as in production and marketing, C. B. Baker, University of Illinois agricultural economist, said today.

Speaking here at the annual American Farm Economic Association meeting on the Purdue University campus, Baker pinpointed some of the problems that farm borrowers and lenders may be expected to face.

The growing importance of developing managerial skills in finance is associated with management of liquidity, Baker said. A farmer's liquidity includes his cash and other liquid assets, borrowing capacity and insurance. His borrowing capacity is an asset that can be affected by production, marketing and financial choices. Financial choices include leasing and custom hire in addition to borrowing.

Referring to the problems of lenders, Baker stressed the need for agricultural economists to conduct educational and research programs for rural banks. He said that problems of rural banks have been largely overlooked, but that they are important to both the borrower and the lender and of concern to the whole agricultural economy. Baker noted that too many rural banks have loan limits that are too low to adequately serve the needs of today's most productive farmers.

The need to find solutions to the problems of borrowers and lenders is imperative, Baker emphasized. Response to Illinois efforts--workshops for farm families and for lenders, an off-campus course in agricultural finance and addition of five specialists to the extension field staff--emphasizes the need to expand this type of work, Baker said.

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/13/64

FOR IMMEDIATE RELEASE

Best Illinois 4-H Tractor Operator To Be Named August 21

URBANA--Nearly 70 4-H and FFA tractor drivers, each a winner in his county or district, will compete this week for top honors in the State Junior Tractor Operators' Contest. Competition during the Illinois State Fair in the Junior Department on August 21 will determine Illinois' 4-H representative to the Western U. S. 4-H Tractor Operators' Contest to be held at New Mexico State University, University Park, New Mexico, October 4-6.

The state's winning 4-H tractor operator will receive an expense-paid trip to this regional event and other awards from American Oil Foundation.

According to F. H. Mynard, University of Illinois state 4-H Club specialist, each contestant will demonstrate his knowledge and skill in servicing and operating a tractor. Driving skill and safety will be based on handling a tractor with a two-wheel trailer and then with a four-wheel wagon attached. Knowledge of tractor care, mechanics and safety will be tested by a written quiz and daily tractor checkup.

Unlike in most other contests, the tractor operators will be working for the lowest score rather than the highest. Penalty points are assessed against each contestant for unsafe procedures, excessive time requirements, questions missed on the quiz and improper checking and driving procedures.

To be eligible for the state contest, the entrant must be a winner of a county 4-H tractor operators' contest or a contest involving three or more high school vocational agriculture departments.

Wendell Bowers, extension agricultural engineering specialist at the University of Illinois, is in charge of the state contest.

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8/14/64

FOR IMMEDIATE RELEASE

Illinois 4-H Tractor
[illegible] to be Held August 11

URBANA--Seventy-two 4-H and FFA tractor drivers, each a winner [illegible] his county or district, will compete with each other for the honor [illegible] the Junior Tractor Operators' Contest. Competition during the Illinois State Fair in the Junior Department on August 11 will determine [illegible]nois' 4-H representative in the Eastern U. S. 4-H Tractor Operators' [illegible], to be held at the [illegible] State University, University Park, Penn[illegible] October 4-6.

The state's winning 4-H tractor operator will receive an [illegible]nse-paid trip to this regional event [illegible] Foundation.

According to E. L. [illegible], University of Illinois [illegible] 4-H [illegible] specialist, each contestant will demonstrate his knowledge and [illegible]l in servicing and operating a tractor. Driving skill and safety [illegible] be based on handling a tractor with a two-wheel trailer and then [illegible] a four-wheel wagon attached. Knowledge of tractor care, maintenance and safety will be tested by a written test and daily [illegible].

Points in each phase [illegible], the tractor operators will be [illegible] for the lowest score rather than the highest. Penalty points [illegible] assessed against each contestant for [illegible] requirements, questions missed on the quiz and improper operating [illegible] procedures.

To be eligible for the state contest, the entrant must be a [illegible]er of a county 4-H tractor [illegible] club or a [illegible] classes of some high school vocational agriculture departments.

Wendell Bowers, extension agricultural engineering specialist [illegible] the University of Illinois, is in charge of the state contest.

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NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

New U. Of I. Circulars On Ag Credit, Estate Planning And Recreation Laws

URBANA--Agricultural credit, estate planning and laws concerning rural recreation are the subjects of three circulars recently released by the University of Illinois College of Agriculture.

Illinois farmers are now using more than three times as much credit as they did just 10 years ago. U. of I. Circular 890, *Using Agricultural Credit*, points out some of the credit problems needing attention and offers some help in their solution. It answers some of the questions posed by greater use of credit, such as whether you should borrow and how much, what sources of credit are available and what is expected of a lender and of a borrower.

If they had spent a few hours in planning their estates, some successful farmers could have retired five years earlier and still have left a greater net amount to their families. Circular 885, *Family Planning of Titles and Taxes in the Transfer of Farm Property*, explains why farmers should plan their estates, suggests some considerations in planning estates and describes the methods generally used. The circular provides farmers with information on alternative courses of action and encourages them to make adequate plans with the help and advice of their attorneys.

Circular 889, *Laws and Regulations Concerning Recreation in Rural Areas of Illinois*, presents information on Illinois laws, court cases and regulations that have to do with establishing, maintaining and

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operating an income-producing farm recreation enterprise, the laws on public recreation facilities in rural areas and sources of federal aid for recreation projects. State supervision, personal liability for injury, taxation and other considerations are explained as they relate to recreation. The circular is intended as a guide, not as a complete legal reference on any particular matter.

The three new circulars are available at the county farm adviser's office or from the College of Agriculture, Urbana.

WDB:ml
8/21/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Further Decline In Midwest Egg Production Forecast

URBANA--By 1968, egg production in the West North Central Region of the U. S. could be 18 percent lower than it is today, and the egg surplus could decline to 204 percent of the area's own needs. In 1963 the surplus was 301 percent. The West North Central Region comprises Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska and Kansas.

R. P. Bentz, University of Illinois professor of egg and poultry marketing extension, used present trends as a basis for these forecasts made at a recent hatcherymen's meeting in Des Moines, Iowa.

Bentz added, however, that since Midwest poultrymen can move into several other industries if egg production becomes too unattractive, any reduction in supplies could eventually return egg prices to more attractive levels. U. S. average prices declined from 34 to 31.4 cents a dozen between 1959 and 1963.

The opportunity for alternative enterprises is not so available in the South Atlantic Region, where egg production growth has been fastest in recent years. However, this region has a substantial consuming base (58 million people compared with 53 million in the North Central states). Increased scale of operation and business coordination have probably had more effect in increasing production there than the other claimed advantages of cheaper land, labor and housing costs.

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Bentz said the main trends in the Midwest were toward greater output per bird and larger production units. Other movements include declines in egg prices and per capita consumption and a regional shift in production to the South.

The U. S. average rate of lay increased from 181 eggs per bird in 1950-54 to 200 in 1955-59 and 210 in 1961. The production rate could continue to rise, but more slowly. Consequently the rise is not expected to affect the future market for pullets and chickens as greatly as it has in the past.

The number of egg producers declined from 3.3 million in 1954 to 2.2 million in 1959. The decrease is likely to continue despite the rising number of potential customers. Between 1959 and 1963, the U. S. population increased from 176 million to 188 million.

Per capita egg consumption, which averaged 352 in 1959, was down to 315 by 1963, and the USDA forecast of 283 to 299 eggs per person for 1968 could even be high, suggests Bentz.

Several types of commercial poultry operations are emerging, according to Bentz:

1. Large integrated units owned wholly or in part by people other than farmers.

2. Specialized farm poultry enterprises that are coordinated through contracts by some outside agency.

3. Specialized independent farm operations that perform all or a major part of the marketing function.

Bentz believes poultry in the Midwest comes as close as other livestock alternatives to bringing desired returns for the dollar invested. However, farmers should be able to find an alternative enterprise if egg production does not produce a satisfactory income.

Hatcheries, feed companies, egg buyers and other agencies that would bear the brunt of a large-scale shift in egg production could perform a worthwhile service by playing an increasing role in coordinating production and marketing activities.

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8/28/64

FOR IMMEDIATE RELEASE

Illinois Farm Size Increase Expected To Continue

URBANA--The increase in acreage of Illinois farms, which advanced from 124 acres in 1900 to 196 in 1959, will continue, forecasts A. G. Mueller, University of Illinois professor of farm management. But he adds that acreage is not the only measure of increase. Farm businesses may grow without a proportionate increase in land area per unit.

The following trends can be expected in the size of farm businesses:

...Grain farms will continue to increase in acreage through farm consolidation and recombination of farm units.

...General grain-livestock farms will also increase in acre size, but not so much as grain farms.

...Highly specialized livestock farms will increase both in number and in size of business.

However, with the adoption of confinement production methods, the land area per unit may not change. In some instances it may even decrease.

Mueller bases these forecasts on relationships observed in the past and on assumptions that farm businesses will continue to adopt existing known technology and that new discoveries will continue to provide a backlog of new technologies.

Adjustments in size of farm businesses similar to those of the immediate past can be expected in the immediate future, Mueller adds, as more farm units have opportunities to adjust to more efficient land and labor combinations and apply new farming techniques.

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The past 20 to 25 years have seen a rapid adjustment in average farm size in both the U. S. and Illinois. The average farm in this state increased from 145 to 196 acres between 1940 and 1959. Greater use of mechanical power and large-capacity machines was largely responsible for this increase, Mueller points out.

University of Illinois studies show that the direct man labor per acre of corn dropped from 7.7 hours in 1940-41 to 4.7 hours in 1959-60. In the same period, the man labor per bushel of corn decreased from 6.4 minutes to 3.2 minutes.

Mueller suggests that forces of habit and the pattern of farm organization in the Midwest would have to change greatly before the trend toward corporation farms and so-called factory farms could advance very far. Naturally, any new farm structure would also have to provide economic advantages over the existing family farm organization before it could increase greatly.

A 1961-62 U. of I. study showed that the typical one-man grain farm had 276 acres and an investment of $143,541. One-man hog and dairy farms had 210 and 163 acres, respectively, and somewhat lower investments. Substitution of livestock for crops to use labor reduced the land area on livestock farms. Because land is a relatively high-priced fixed investment, investment per man was lower on the livestock farms than on the grain farms.

In terms of investment per man, the increases in the two-man over the one-man units were 90 percent on grain farms and 77 and 66 percent on hog and dairy farms, respectively. Figures based on the use of returns to all labor and management per man unit as a measure of efficiency suggest that two-man grain farms have greater efficiency of size than one-man farms.

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The residual income was $5,518 per man on the one-man grain farms and $6,058 per man on the two-man farms. Returns per man unit did not increase for two-man farms over one-man farms in either hog or dairy enterprises.

The wide range in the amount of land associated with a given unit of labor supply suggests that many farms have less than optimum combinations of labor, land and capital. Reasons for this wide range, says Mueller, include differences in the managerial capacity of farm operators, slow mobility in transferring land from one farm unit to another and expansion of livestock enterprises on farms of fixed land area.

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8/28/64

FOR IMMEDIATE RELEASE

Higher Profits Likely On Larger One-Man Grain Farms

URBANA--Profits from one-man grain farms will probably increase with the acre size of the property, according to a University of Illinois study in northern Illinois. In the study, returns to labor and management varied from $174 a month on the smaller farms averaging 157 acres to $665 on the larger farms averaging 383 acres.

Labor and management returns per tillable acre did not decline significantly at the upper end of the farm size range. However, reports A. G. Mueller, U. of I. professor of farm management, there could have been a decrease in labor and management returns per tillable acre if the ratio of land to labor had expanded too far for top efficiency.

According to the study, one-man grain farms in the 300- to 500-acre range are the most profitable if the operator can get the land and has the operating capital to go with it. Farms with fewer than 260 acres, operated as a straight grain business under a crop-share lease, will hardly provide a reasonable family income to a tenant.

On the other hand, if these smaller farms are owner-operated, with no debts, the farmer's net income will be equal to the sums of returns to labor and management plus an interest charge on the capital.

Mueller points out that the size of one-man grain farms varies considerably. Personal preferences, such as semiretirement or off-farm income, may explain the existence of some small grain farm units. The lack of enough available land, either to rent or to buy, may keep other one-man grain farms from becoming larger. For some farms, additional livestock may provide a reasonable alternative to adding land.

However, other things being equal, the greater labor and management rewards on one-man farms with more than 300 acres suggest that the current trend toward larger grain farms will continue.

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8/28/64

FOR IMMEDIATE RELEASE

Turfgrass Field Day Announced

URBANA--Tours of the turfgrass demonstration plots and discussion of turfgrass work and problems will be featured here at the Annual Field Day September 18, according to University of Illinois turf specialist J. D. Butler.

Activities will get under way at 10 a.m. at the turf research area on the horticulture farm on South Lincoln Avenue in Urbana.

The afternoon session will begin at 1:30 p.m., Butler says.

Specialists will answer turf problems, including those on weeds, diseases and turf management.

Extensive greenhouse and laboratory research as well as field tests on turfgrass problems on the campus and in outlying areas is carried on by specialists in the College of Agriculture. Other demonstration and research plots are maintained at Downers Grove, Dixon Springs, Elwood and DeKalb, says Butler.

The public is invited to attend the Turfgrass Field Day on September 18 at Urbana.

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8/28/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Check Alternatives Under The 1965 Wheat Program

URBANA--Illinois wheat farmers' decisions to participate in the voluntary 1965 Wheat Program will depend on the changes from the 1964 program. These changes deal with the price support level, value of certificates, diversion payments and feed grain substitution. Local ASCS offices can answer questions on specific changes. The signup dates are August 25 through October 2.

Illinois farmers have basically seven alternatives, according to University of Illinois extension economist Duane E. Erickson:

1. Farmers who decide not to sign up in the program can produce more wheat than their allotment. No price support or certificates are available under this choice. Market prices will determine gross returns from wheat.

2. A farmer may decide to grow wheat within his 1965 allotment and, in addition, divert to conserving uses an amount equal to 11.11 percent of the allotment. Wheat growers who select this alternative will receive price support at the state average of $1.32 per bushel. Price support rates range from $1.22 to $1.39 per bushel for Illinois counties.

Wheat farmers who sign up and fulfill program provisions will be eligible for two kinds of marketing certificates--domestic and export. In 1965, domestic certificates will be valued at 75 cents per bushel and export certificates at 30 cents. Certificates will be issued for a

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maximum of 80 percent of the normal yield on a farm wheat allotment. Domestic certificates will represent up to 45 percent of the normal production on the allotment, and export certificates up to 35 percent. Market prices or the loan rate will be the price received for wheat produced.

3. A farmer can plant within his allotment and divert 10 percent in addition to the 11.11 percent of the allotment. He would receive diversion payments in addition to price support and certificates. Diversion payments are based on 50 percent of the county support price times the normal production per acre diverted above the 11.11 percent level ($22.44 per acre average for Illinois).

4. A farmer can divert 20 percent of his allotment in addition to the minimum 11.11 percent. In this case he would produce less wheat and receive higher total diversion payments than if he diverted only 10 percent as in the above alternative.

5. A farmer can produce up to 50 percent above his allotment and store under bond the production above normal.

6. A feed grain substitution provision applies to farmers who have a feed grain base and a wheat allotment and sign up for both the wheat program and the feed grain program. The farmer must comply with each. Under the provision, the feed grain base and wheat allotment can be combined to produce either wheat or feed grain.

7. Farmers who grew oats and rye in 1959 and 1960 can substitute wheat for the oats-rye, if the oats-rye base is requested.

"Analyze your own farm situation by calculating the returns over cash costs under the alternatives that apply to your farm," advises Erickson.

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FOR IMMEDIATE RELEASE

Workshops Set For FFA Reporters And Their Advisers

URBANA--Nearly 300 reporters and advisers from Future Farmers of America chapters throughout Illinois are expected to attend one of five reporters' workshops during September. This marks the fifth year for the statewide workshops.

G. Donovan Coil, executive secretary of the Illinois FFA, says that the workshops are designed to help reporters do a better job of getting chapter news to the community.

Reporters will receive suggestions and get practice in writing news stories, preparing radio interviews, using television, taking photographs and building exhibits. Chapter advisers will study means of improving their public information programs.

Here's the schedule for the workshops: Mount Vernon, Central Church of Christ, September 8; Carlinville, Farm Bureau Building, September 9; Galesburg, Farm Bureau Building, September 10; Oregon, Farm Bureau Building, September 17; and Urbana, University of Illinois, September 30.

The workshops will be presented by Extension Editorial Office staff members of the University of Illinois College of Agriculture.

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FOR IMMEDIATE RELEASE

Cereal Grains Yield Well On Allerton Trust Farms

URBANA--This year's wheat crop on the Allerton Trust Farms averaged 50.7 bushels per acre on 288.2 acres, and the oats averaged 72.3 bushels on the 62.1 acres harvested for grain, reports Donald G. Smith, manager of the University of Illinois Trust Farms.

Although the 1964 wheat yield is the fifth highest in the history of the farms, it has been exceeded four times during the past ten years and is 10.7 bushels per acre lower than last year's record high of 61.4 bushels per acre. The 10-year average yield is now 45.1 bushels per acre.

The fields producing 1965 seed included 153.9 acres of Certified Pawnee and 32.1 acres of Registered I Ottawa. These acreages passed field inspection for certification. The remaining fields raised 28.4 acres of Pawnee and 73.8 acres of Ottawa.

Smith reports that the added fertilizer in the split applications was a sound investment, giving an average of 53.6 bushels per acre compared with 47.0 bushels from wheat that received a single application.

The combined 1962, 1963 and 1964 advantage in favor of the split application is 4.4 bushels per acre, a 9.3 percent increase in yield on farms using split applications. Part of this increase may be due to the changing percentages of Ottawa and Pawnee grown in total and on individual farms.

The split applications have also averaged 19 more pounds of nitrogen and 15 more pounds of phosphate. Probably less leaching of nitrogen has occurred when the fertilizer has been applied in both the fall and the spring, explains Smith.

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He adds that with the available information it is impossible to exactly compare the yields of Ottawa and Pawnee. The estimates indicate, however, that Ottawa exceeded Pawnee by two to six bushels per acre, depending on the conditions of comparison.

The 1964 oat crop comprised 260.3 acres of Certified Clinton 60, Certified Newton and Registered I Garland varieties sown in the spring. Of this total, 198.2 acres were clipped to comply with the feed grain program; the remaining 62.1 acres yielded 4,490 bushels (72.3 bushels per acre).

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FOR IMMEDIATE RELEASE

Agronomy Day Set, September 10 At U. Of I.

URBANA--At the annual University of Illinois Agronomy Day, Illinois farmers will hear the latest research results on narrow-row corn, sorghum-sudangrass hybrids, new crop varieties and many other studies conducted by U. of I. agronomists. September 10 is the date to remember, according to agronomist Bill Pardee, this year's Agronomy Day program chairman.

Pardee reports that tours will start at 9:00 a.m. and continue over the Agronomy South Farm throughout the morning. Lunch and refreshments will be available.

Included in the program at the South Farm are:

1. Agronomist Johnny Pendleton's work on corn-row spacing and population. Corn is planted in 20-, 30- and 40-inch rows with one, two, three or more kernels per hill. Populations range from 16,000 to 96,000 plants per acre.

2. Soybean researcher Bob Howell's efforts to raise soybean yields. He'll explain why soybean yields don't increase so rapidly as corn yields, and what problems and challenges are involved in boosting soybean yields.

3. Forage specialists' studies on large plantings of sorghum-sudangrass hybrids and how they're performing under various cutting heights and management systems. Specialists will also compare outstanding new alfalfa varieties growing side by side with present favorites.

Other features include new disease-resistant corn hybrids, control of giant foxtail in corn and soybeans, soybean variety trials and up-to-the-minute information on wheat varieties and fertilization.

U. of I. agronomists hope to top last year's attendance record of 2,500. The public is invited.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Virus Strikes Southern Illinois Corn

URBANA--Agronomy and plant pathology specialists of the University of Illinois College of Agriculture today (August 4) confirmed reports that a potentially dangerous corn disease has invaded three counties in southern Illinois

The disease resembles corn stunt, which was discovered in California in 1942 and is caused by a virus. Certain insects are suspected to be carriers of the virus, although it may also be transmitted by other means.

The disease can wipe out an entire corn crop. Severely infested fields may have to be harvested for forage.

Farmers are urged to check their fields for signs of the disease and to report suspected outbreaks to their county farm advisers. Infected fields show these symptoms: At first the younger leaves show faint yellowish stripes, together with a shortening of the uppermost internodes that causes the plant to appear bunched at the top. The yellowing may increase in extent and intensity. As the disease progresses, the newly formed internodes show a pronounced shortening, making the diseased plants only one-third to one-half as tall as healthy plants. Leaves of certain hybrids may turn a brilliant purple-red. Diseased plants commonly develop "extra" ears that are smaller than normal and bear little or no seed.

Corn that has reached the milk stage without infection is not in danger this year.

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U. of I. scientists say that there is limited information on the disease or its control. This much is known, however:

1. The disease is caused by a virus.

2. It resembles corn stunt or a similar disease now reported in Mississippi, Louisiana, Georgia, Tennessee, Kentucky, Ohio, Indiana, Missouri and Alabama.

3. It has been known to be in Texas, New Mexico and Arizona for several years, but most of the spread to other states has occurred since its recent discovery in Mississippi four years ago.

4. It is probably spread by insects.

5. It appears to be generally associated with Johnsongrass.

6. It first appears on bottomland but can move to upland.

7. There are differences in levels of susceptibility in corn varieties.

8. Corn lines from South and Central America and from the southwestern United States show some tolerance to the stunting.

In cooperation with the USDA and other states, the U. of I. scientists are launching an intensive program to study the disease, its cause, its method of transmission and recommendations for controlling its spread. These studies will provide the basis for later recommendations relative to the 1965 corn crop.

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9/4/64

FOR IMMEDIATE RELEASE

Dairy AI On Upswing in Illinois

URBANA--Nearly 45 percent of all Illinois cows and heifers bred for dairy purposes in 1963 were bred artificially. An estimated 17.6 percent of these cows were registered.

University of Illinois dairy scientist Jerry Cash says Illinois ranked ninth among all states in the number of dairy cows bred artificially. However, the state ranked only 21 in the percentage of cows bred.

In Illinois 208,213 cows were reported bred to dairy sires, 38,389 were bred to beef sires and 17,812 beef cows were bred to beef sires.

Cash says 35.4 percent of the cows in the state were bred artificially in 1959, nearly 10 percent below the 1963 figure.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

New Soybean Variety Looks Promising

URBANA--Wayne, a new soybean variety adapted to south-central Illinois, has a promising future if it continues to produce as well as it has during the past six years in extensive tests in six midwestern states.

The new variety should be generally available to farmers in 1966. Seed supplies are being increased this year and will be distributed after harvest to certified seed growers in the participating states, reports plant physiologist R. W. Howell of the Regional Soybean Laboratory here. In addition to Illinois, Indiana, Iowa, Kansas, Missouri and Nebraska can grow the new variety, he adds.

Early selection work for Wayne at the Illinois agricultural Experiment Station was aimed at pustule resistance, plant vigor and lodging resistance. But on the basis of performance at 20 locations, it compared favorably with other adapted varieties in yield as well as maturity, lodging resistance, seed quality and weight and percentage of protein and oil in the seed.

Wayne will probably replace Shelby and perhaps some Clark soybeans, says Howell. In Illinois tests during the past two years, Wayne equaled or outyielded both Shelby and Clark in all test locations except one. At Carbondale, Clark made 34 bushels per acre, while Wayne and Shelby made 33 bushels. During the same time, Wayne produced 51 bushels per acre at Urbana, while Shelby made 47 and Clark 46.

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The new variety resembles Shelby in appearance. It is the first variety earlier than Clark 63 to carry bacterial pustule resistance. In addition, Wayne apparently has a fair amount of field resistance to Phytophthora rot.

Under some conditions, the stems tend to remain green after the pods ripen. And, says Howell, in highly alkaline soils, Wayne is apparently more susceptible to iron deficiency chlorosis than other common varieties. Its chief advantage over present commercial varieties is its consistently higher yields, says Howell.

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9/3/64

FOR IMMEDIATE RELEASE

ISPFMRA Fall Tour At Macomb, September 16

URBANA--The Illinois Society of Professional Farm Managers and Rural Appraisers will hold its annual fall tour in the Macomb area on September 16, according to Fay Sims, the group's secretary-treasurer. Registration will begin at 9 a.m. at the Western Illinois University Beef Cattle Performance and Swine Testing Stations on Route 64 at the northwest corner of Macomb.

Activities to be viewed at these stations, beginning at 9:30 9:30 a.m., include the selection of bulls with the genetic ability to gain rapidly on small amounts of feed, and the 50-litter swine testing facilities owned and operated by 50 swine producers in cooperation with Western Illinois University.

At 11 a.m. the tour will continue at the 80-acre Timber Lakes Farm, Bushnell, which Curtis Serven has developed for recreation. The 12:15 p.m. lunch stop will be at Bushnell.

In the afternoon the party will visit the Willis Gale and Son Farm, a 3,000-acre feeder-cattle operation near Cuba. The entire farm is reclaimed strip-mine land. Features include a complete new set of buildings, five silos, 500 steers, high-level soil fertility and crop production. The tour will finish at 3:30 p.m.

Further details are available from Fay Sims, secretary-treasurer of the Illinois Society of Professional Farm Managers and Rural Appraisers, College of Agriculture, University of Illinois, Urbana.

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9/3/64

FOR IMMEDIATE RELEASE

Name Extension Study Team

URBANA--Secretary of Agriculture Orville L. Freeman and University of Illinois President David D. Henry have jointly appointed six members of a special study team to review the relationship of the Cooperative Extension Service and farm organizations in Illinois.

Members of the team include Herbert R. Albrecht, president, North Dakota State University; Richard Ballard, auditor, USDA Inspector General's Office; L. E. Card, emeritus head of the University of Illinois department of animal science; William Lavery, field representative, Federal Extension Service, USDA; Shannon McCune, staff associate, Office of the President, University of Illinois; and Raymond E. Seltzer, vice president, Agri Research, Inc., Manhattan, Kansas.

The study team has been asked by Secretary Freeman and President Henry to determine "if the Cooperative Extension Service, as it is housed and operated in the various counties of the State of Illinois, functions and is recognized by the public as functioning as an independent agency not in any formal way connected with or dependent upon a particular farm or other organization."

Members of the team will meet on the University of Illinois campus on September 21 and 22 to work out the organizational details of the study assignment. The study is expected to take place early this fall. When completed, an advisory report will be made to Secretary Freeman and President Henry as a basis for improving the Cooperative Extension program in the State of Illinois.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE P.M. SEPTEMBER 10, 1964

Illinois Scientists Aim For Higher Soybean Yields

URBANA--Higher soybean yields are the goal of Illinois agronomists and scientists of the USDA Regional Soybean Laboratory, working in conjunction with the University of Illinois. Methods for achieving this goal include improved breeding techniques, increased resistance to disease, better response to plant foods and more effective weed control. U. of I. researchers discussed these methods at today's annual Agronomy Day at the South Farm here.

Improving soybeans is more difficult, in several ways, than boosting corn yields. For instance, so far it has been impossible to produce a commercial soybean hybrid. It is impracticable to emasculate soybeans manually on a large scale, and male sterility to facilitate production of a hybrid has not been achieved by other methods. Commercial onion and sorghum hybrids would be impossible without this technique, which has also made it easier to produce corn hybrids.

Chemicals have not been satisfactory in producing soybean male sterility because they have damaged the female organs as well as the male organs in the flower. Two genetic lines have produced sterility, but these too have been discarded because they caused sterility in both organs.

Recent attempts to find male sterility have involved the use of crosses between soybeans and their wild relatives. So far, however, researchers have found no sterility in such crosses.

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Nevertheless reciprocal crosses between two wild relatives of soybeans show promise, reported agronomist H. H. Hadley at the field day.

Also showing promise are other breeding methods, such as recurrent selection. This technique requires many controlled crosses which, at the moment, are tedious and time-consuming. Breeders have to emasculate each individual soybean flower and do the crossing by hand. Bees might speed up this job, reported soybean breeder R. L. Bernard at the field day. Trials are under way to measure their effectiveness.

Breeders have had much greater success in producing disease-resistant soybean varieties. Harosoy 63, Hawkeye 63, Clark 63 and Chippewa 64, all resistant to Phytophthora rot, have been released to farmers. Clark 63 is also resistant to bacterial pustule. The breeders are now working to develop varieties that are resistant to bud blight and brown stem rot diseases.

The response of soybeans to fertilizers is not so great as other crops, such as corn. Soybeans can usually obtain their plant food at moderate soil fertility levels. They are not so dependent on nitrogen fertilizers because their root nodules enable them to get nitrogen from the air. However, a major section of U. of I. soybean research concerns nitrogen nutrition and the nodule system.

Weed control offers its own problems. For the present, only pre-emergence herbicides are satisfactory for use with soybeans. Sometimes even these chemicals can cause lower yields. The need for good weed control is emphasized by results of recent studies, which show that each pound of weeds may displace a pound of crop plant.

U. of I. agronomist F. W. Slife reported at the field day that the use of pre-emergence herbicides had increased sixfold since 1960. Randox, Amiben, Alanap and Sodium PCP are the major pre-emergence

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herbicides in use. Randox has done a good job of controlling annual grass weeds, especially on the darker soils. Soybeans show good tolerance to it. Amiben has controlled both grasses and broad-leaved weeds well.

Although Alanap has not done so well in U. of I. tests, it is widely used. Sometimes it damages soybeans, especially when heavy rain falls soon after application. In some cases this year, soybean roots have tended to grow upward when Alanap was used.

Sodium PCP is used to some extent on lighter soils that are fairly low in organic matter. "Burning" may occur when this chemical comes into contact with the roots or is splashed onto the leaves. New pre-emergence herbicides being tested by the University of Illinois include Lorox, Treflan, Vernam and several coded materials from commercial companies.

4-(2,4-DB) may be used where cockleburs are serious. It may also give some control for morning glory and giant ragweed. But 4-(2,4-DB) can reduce soybean yields if recommended rates are exceeded. Researchers are studying the effects of rates of application and the susceptibility of various weeds to this chemical.

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FOR RELEASE P.M. SEPTEMBER 10, 1964

Choose Alfalfa Varieties According To Their Use

URBANA--The best alfalfa variety to buy depends on how long the stand is to be left down and how it is to be used, said University of Illinois agronomist J. A. Jackobs at the annual Agronomy Day here today.

For instance, if a stand is to be left down for more than two years, choose a variety like Vernal, Cody, Buffalo or Ranger, which is resistant to bacterial wilt. This disease usually kills out susceptible varieties in the third harvest year.

However, when a stand is needed for only one or two years, do not worry about wilt, Jackobs advised. In this case, a susceptible variety like DuPuits, Alfa or FD-100 can be used.

Choice of variety depends, too, on when the stand is to be cut or grazed. Farmers in southern Illinois who can harvest before May 15, or those in the central and northern parts of the state who can harvest before June 1, should choose DuPuits, Alfa or FD-100. These varieties can stand cutting three or four times a year. They are vigorous, early maturing and high yielding and have a fast "bounce-back."

Farmers who cannot cut their fields until early June must get back to a later maturing variety, such as Vernal, Buffalo, Cody or Ranger.

The best stands to graze have a broad crown that resists trampling. First choice in this category is Vernal, said Jackobs.

The agronomist emphasized the value of good seed from well-tested varieties. "Buy from a seedsman with a good reputation, who takes a pride in the quality of his product--not in its cheapness," he advised.

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9/8/64

FOR RELEASE P.M. SEPTEMBER 10, 1964

Take Out 40-Inch Horse Row, Increase Corn Yields

URBANA--Taking the 40-inch horse rows out of our cornfields may be another short step toward 200-bushel corn yields, University of Illinois agronomist Johnny Pendleton told visitors at the annual Agronomy Day here today.

"Commercial fertilizers have replaced fish, and horse-drawn machinery is gone, but we continue to plant our cornfields for the horse," said Pendleton.

By using all of the latest production practices, many farmers have reached the point where additional changes will add only a few bushels to their yields. What can they try then? Pendleton suggested raising their plant population judiciously by choosing hybrids that will stand and yield well under crowded conditions, and becoming more interested in planting patterns. Changing a planting pattern to narrow corn rows will do little to increase yields at the 75- to 100-bushel yield level, but this does not hold for really high yield levels, Pendleton said.

Last year Pendleton obtained the highest yield in his experiments--173 bushels per acre--by spacing corn 30 inches apart with 28 thousand plants per acre. This year's experiments include three row spacings--20, 30 and 40 inches--with five plant populations--16, 20, 24, 28 and 32 thousand plants per acre. Another experiment involves the spacing or grouping of plants within a 40-inch row when a high plant population is desired.

As plant populations increase, there will probably be a trend toward more drilling or equal spacing in the row, and also the use of narrower rows. Neither of these practices will give consistent or spectacular yield increases. But they will add a few bushels, especially in favorable corn-growing seasons, Pendleton predicted.

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FOR RELEASE P.M. SEPTEMBER 10, 1964

Researchers Study Management Of Sorghum-Sudangrass Hybrids

URBANA--Because of the high interest in Sorghum-Sudangrass hybrids and the high number of them on the market, University of Illinois agronomists are comparing management practices on 20 of the leading hybrids and Sudangrasses likely to be marketed in the state.

Complete results for the 1964 growing season will soon be available. Many Sudangrass varieties and Sorghum-Sudangrass hybrids as well as three Pearl Millet hybrids, are under study. Millets may compete with Sudangrass for forage. The forage crops are compared, using cutting heights of three and six inches above the ground and three and and four cuttings per season, reported U. of I. agronomists C. N. Hittle and A. W. Burger at the annual Agronomy Day here today.

This is the first year for height-of-cutting tests on these forage crops. At least two years of testing are needed to determine the relative performance of these new hybrids and varieties under various management systems. In addition to yield measurements, the agronomists are making determinations on prussic acid, protein and nitrates. Height measurements are made at harvest time.

In cooperation with the Department of Animal Science, the agronomists are also conducting a preliminary sheep grazing study with 14 of the Sorghum-Sudangrass hybrids and Sudangrass varieties, drilled in both 8-inch and 16-inch rows. Burger and Hittle are trying to determine the relative productivity of the various hybrids and varieties as well as the sheep preference, wastage and regrowth ability in both row widths.

One true hybrid Sudangrass that the agronomists are studying is reportedly somewhat lower in the substance, dhurrin, which ruminants can convert to prussic acid. It also has a finer stem than many of the Sorghum-Sudangrass hybrids.

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9/8/64

FOR RELEASE P.M. SEPTEMBER 10, 1964

Herbicide Screening Continues

URBANA--Recent studies here have indicated how much a farmer can afford to spend on weed control. They suggest that researchers direct their attention to methods of controlling weeds as early in the season as possible. Weed Specialists F. W. Slife and E. L. Knake now devote much of their research efforts to screening pre- and post-emergence herbicides to determine their potential for controlling weeds on Illinois farms.

The agronomists are also testing the use of herbicide mixtures and different formulations and incorporation methods in an effort to obtain more consistent herbicide performance.

For corn, Randox, Randox-T and atrazine are still the leading pre-emergence materials, the agronomists reported here today at the annual Agronomy Day at the University of Illinois South Farm. Randox has done well on the darker soils that are relatively high in organic material, especially where annual weeds like giant foxtail are the major problem. Randox-T is similar to Randox, but it controls annual broad-leaved weeds as well as grasses.

Atrazine is especially effective on the lighter soils that are somewhat low in organic matter. It requires a little more rainfall initially than some of the more soluble chemicals, but it is more effective when heavy rains follow application. Weed control lasts longer too. Current research in the field and laboratory is providing a better understanding of what happens to atrazine in the soil and what can be done to avoid residue problems with it.

Slife and Knake are also making extensive tests with post-emergence applications of Lorox. They are trying various rates and checking the effect of using spreader chemicals and nitrogen solutions.

Although their primary emphasis is on pre-emergence herbicides, the agronomists assured visitors that rotary hoeing and row cultivation are still effective means of controlling weeds. But because of increased interest in and the greater availability of chemicals, the specialists feel they should spend their efforts on these newer, less-understood methods of weed control.

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9/8/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

U. Of I. Entomologists Give Pointers On Mosquito Control

URBANA--You may be raising your own mosquitoes in stagnant or impounded water near your home, according to two University of Illinois entomologists. H. B. Petty and Steve Moore suggest draining water from low spots in eave troughs, tin cans, fish ponds, old tires, bird baths and similar places where mosquitoes may breed.

Recent cases of encephalitis in Illinois have focused attention on mosquito control, according to the U. of I. entomologists. They say that mosquitoes may be carriers of one strain of the disease, and an emergency control program might help to reduce the incidence of the disease.

You can kill mosquitoes hiding in shrubbery and grass during the day by spraying with an effective insecticide. The U. of I. specialists suggest using malathion. It is comparatively harmless to animals and birds and is moderately safe to use around fish-bearing waters.

The odor of malathion may be objectionable to some people, but it will dissipate within a few days.

Treat shrubbery and tall grass with a one-percent water-diluted spray of malathion. Also spray under porches and buildings. A proper solution should contain two fluid ounces of 50 to 57 percent emulsifiable concentrate in one gallon of water. This treatment may be repeated every 7 to 10 days if necessary.

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For control inside the home, a space spray of fog of .1 percent of pyrethrin may be used for a quick knockdown. You should get good results by spraying 4 to 5 seconds in each room with a pressurized can or bomb. A 20 percent DDVP resin strip placed in each room also will give some control. The slowly vaporizing DDVP will kill both mosquitoes and flies for four to six weeks.

Spraying is only a temporary emergency procedure, according to Petty and Moore. A more permanent control program involves destruction of mosquito breeding areas on a community basis.

For more information on mosquito control, contact your local extension office.

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9/11/64

FOR IMMEDIATE RELEASE

Four Illinois FFA Chapters Honored

Four Illinois chapters of the Future Farmers of America will be honored at the annual National FFA Convention in Kansas City on October 14 and 15. Gold emblems will be given to Maroa and Williamsfield chapters, and silver emblems to Central chapter, Clifton, and Sycamore chapter.

These awards are for outstanding activity records during the 1963-64 school year. Each chapter receives a special plaque or, if it has received a plaque in previous years, a spur to attach to this plaque

Each state FFA Association can enter two or more chapters in the national contest, the number depending on state FFA membership. Judging was done by staff members of the Agricultural Education Branch in the U. S. Office of Education, Department of Health, Education and Welfare, Washington, D. C.

The FFA has about 8,500 local chapters, with associations in 49 states and Puerto Rico.

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9/11/64

NEWS FROM AGRICULTURE

NIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Hog Profits Depend Largely On Feeding Efficiency And Feed Costs

URBANA--The greatest difference between high- and low-return hog enterprises in 1963 was due to feeding efficiency and feed cost per 100 pounds, reports D. F. Wilken, University of Illinois farm management extension specialist, in the recently published summary of farm business records.

The study included 109 high- and 156 low-return farms in a sample of 709 farms farrowing ten or more litters a year. Returns per $100 feed fed were $158 for the high group and $111 for the low group and averaged $131 on all farms.

The saving of $2.76 per 100 pounds in feed costs on the high-return farms compared with the low-return group amounted to a total saving of about $2,900 a farm. Other differences in favor of the high-return farms show 0.6 more pig weaned per litter, 0.7 percent lower death loss and 67 cents more per 100 pounds received for pork sold.

Between 1955 and 1963, the average size of hog enterprise increased at the rate of about three litters a year; from 41 litters per farm to 65.

The returns of $131 per $100 feed fed to hogs in 1963 were $15 below the 15-year average. The 1962 returns were $12 above the 15-year average. Fluctuations about this average are related to changes in supply and demand for pork and the price of corn.

The 1963 average price received per 100 pounds of pork, $14.86, was $1.44 lower than in 1962. The supply of pork per capita was the highest since 1959 and 1960. The yearly average price of corn fed was $1.11 per bushel, the highest since 1959.

Higher corn and protein supplement prices boosted feed costs per 100 pounds of pork produced from $9.90 in 1962 to $10.68 in 1963.

The complete summary of Illinois farm business records has been published as Circular 891. Copies are available from farm advisers and the University of Illinois College of Agriculture, Urbana.

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CGW:ml
9/18/64

FOR IMMEDIATE RELEASE

Illinois Boosts Per Man Farm Output

URBANA--Farm output per man nearly doubled on southern Illinois farms and increased by 60 percent in northern Illinois between 1951-53 and 1960-62, reports D. F. Wilken, University of Illinois farm management extension specialist, in the recently published summary of Illinois farm business records.

The increased output was measured from the business records kept by 6,000 farmers cooperating with the Department of Agricultural Economics and the Illinois Farm Bureau Farm Management Service.

Larger farm businesses and the adoption of higher production technology on record-keeping farms are, together, the chief reasons for the improvement, says Wilken. He adds that if Illinois farms had not made these output-increasing adjustments, average farm earnings in 1963 would not compare nearly so well with earlier years.

In northern Illinois the average farm acreage increased by 15 percent from 1951-53 to 1960-62. Southern Illinois farms became 12 percent larger during this period.

Other farming adjustments included more intensive land use, larger livestock enterprises on specialized farms and the elimination of small livestock enterprises on general farms.

The complete summary of 1963 Illinois farm business records has been published as Circular 891. Copies are available from farm advisers and the University of Illinois College of Agriculture, Urbana.

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CGW:ml
9/18/64

FOR IMMEDIATE RELEASE

Note to Editor: This story is most appropriate in the area of Illinois north of Jacksonville and Mattoon.

Grain Earnings Best Since 1951; Dairy Up Slightly; Hogs, Beef Down

URBANA--Typical northern Illinois 200-acre grain farms had higher farm and family earnings in 1963 than in 1962. Dairy returns increased slightly, but hog returns fell and beef returns dropped sharply, report A. G. Mueller and D. F. Wilken, University of Illinois professors of farm management, in the recently published summary of Illinois farm business records.

The $10,516 earnings on 220-acre grain farms were the highest since 1951. Heavy crop yields, to which good weather contributed, and improved grain prices were factors in this increase. Operating expenses continued to rise, reaching 32 percent above the 1951-63 average figure. Total investment was more than $131,000 per farm studied.

The 220-acre dairy farm earnings of $8,897 ($8,577 in 1962) resulted largely from increased sales of crops. Operating expenses and depreciation were 26 percent higher than the 1951-63 average. The average number of cows did not change much during these three years being 37 in 1963 and 38 in 1961 compared with only 25 in 1951.

Lower prices were an important reason for the drop in hog farm earnings from $10,768 in 1962 to $8,225 in 1963. Investment per farm was more than $135,000 in 1963. Mueller and Wilken advise that the average number of litters per farm increased from 43 in 1951 to 82 in 1963. During this period the average months of labor per year decreased from 19.3 to 15.9.

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However, the greatest decrease in farm and family earnings on 220-acre farms was in beef, where returns dropped from $11,811 in 1962 to $4,629 in 1963. Most of this decrease was in value of livestock inventories. Cash balance per farm actually increased, and operating expenses were actually lower in 1963 than in 1962.

Mueller and Wilken suggest that farmers, feeling the effects of lower cattle prices, adjusted their cash operating expenses to attempt to hold their outlay in line with an expected reduction in net farm income.

The complete summary of Illinois farm business records has been published as Circular 891. Copies are available from farm advisers and the University of Illinois College of Agriculture, Urbana.

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CGW:ml
9/18/64

NEWS FROM AGRICULTURE

NIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Illinois DHIA Dairymen Feed 43 Percent More Grain Than Ten Years Ago

URBANA--Illinois DHIA members fed almost 43 percent more grain during the testing year ending in April than they did 10 years ago.

The extra grain was one reason that the average DHIA cow produced about 20 percent more milk this year and earned nearly $48 more income over feed costs than in 1954, explains Leo Fryman, University of Illinois extension dairy specialist.

Fryman notes that the $48 figure is somewhat misleading, since grain ration costs were 32 cents per hundred less this year than in 1954. However, when grain prices for both years are made equal, income over feed costs still is $34 higher per cow this year.

Average milk production per DHIA cow reached 11,789 pounds during the 1963-64 testing year--up 1,983 pounds over the 1954 yearly average.

Fryman says factors other than higher grain feeding that have contributed to this milk production rise are the increased use of artificial insemination, improved milking and herd management techniques and better equipment.

The widespread use of AI bulls that have the ability to transmit high production has had a tremendous impact on the genetic potential for production in many Illinois herds, Fryman explains.

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The U. of I. specialist says grain feeding in many herds may be reaching the point of diminishing returns--where the profit for increased production is less than the cost of the added feed.

Amount of milk produced per pound of grain fed dropped from 3.5 pounds in 1954 to 2.9 pounds in 1963-64. Research indicates that under present feed prices cows with access to quality roughage should not be producing less than 2.5 pounds of milk per pound of grain fed.

Fryman says another important dairy feeding trend is the increased use of silage on some farms. The average of 8,104 pounds of silage fed per cow last year was more than twice the amount fed during 1954.

One important reason for the increased silage feeding has been the use of silage to replace pasture during the summer. The average DHIA cow was on pasture 144 days last year compared with 170 days 10 years ago.

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HDN:je
9/22/64

FOR IMMEDIATE RELEASE

Deadline For Gasoline Tax Refund Is Sept. 30

URBANA--Farmers are entitled to a refund of four cents a gallon on gasoline used on a farm for farming purposes if they file a claim by September 30, according to Charles E. Whalen, University of Illinois specialist in agricultural law.

This claim will be allowed only if filed on Internal Revenue Service Form 2240 with your District Director on or before the deadline date, Whalen says. Forms are available through the Internal Revenue Service, county farm advisers, Farm Bureau Farm Management offices, post offices and some banks.

Gasoline is considered used for farming purposes, Whalen says, if it is used by the owner, tenant or operator in carrying on trade or business on a farm. The refund may not be claimed for gasoline used off the farm, such as on the highway, even though the farmer is transporting livestock, feed, crops or equipment.

If a farm operator has a neighbor, a custom operator or someone else perform farm services for him on his farm, the tax refund on this gasoline may be claimed by the farm operator, Whalen points out. No one else may claim it.

Farmers who file claims for refunds on Form 2240 should keep clear and complete records to enable the Internal Revenue Service to check the accuracy of the refund claimed, Whalen emphasizes.

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JAP:ml
9/22/64

FOR IMMEDIATE RELEASE

Feeder Livestock Production Higher In 1963, But Returns Were Low

URBANA--Illinois livestock feeders produced considerably more pork and beef in 1963 than in 1955, but returns per $100 feed fed were low, reports D. F. Wilken, University of Illinois farm management extension specialist, in the recently published summary of Illinois farm business records.

The 60,093 pounds of pork produced per farm in 1963 more than doubled the 25,461 pounds in 1955. However, returns of $108 per $100 feed fed were a four-year low, although not so low as the returns in 1955 and 1959.

The 75,517 pounds of beef per farm were 81 percent more than the 41,800 pounds in 1955. However, the $88 return per $100 feed fed was the lowest since the $86 in 1952 and $81 in 1953. It is also well below the five-year average of $116 and the 15-year average of $122.

Prices paid per 100 pounds for feeder cattle were $2.02 lower in 1963 than in 1962, but prices received were $2.91 lower. Unfavorable price spread margins, combined with $1.03 higher feed costs per hundredweight produced in 1963, resulted in very low profits on many farms.

The complete summary of 1963 Illinois farm business records has been published as Circular 891. Copies are available from farm advisers and the College of Agriculture, University of Illinois, Urbana.

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CGW:je
9/22/64

FOR IMMEDIATE RELEASE

Note to Editor: This story is most appropriate in the area of Illinois south of Jacksonville and Mattoon.

Dairy Earnings Best Since 1951; Grain And Hogs Fall Slightly

URBANA--Farm and family earnings on typical 220-acre southern Illinois dairy farms in 1963 were $1,190 above the 1962 total and the highest since 1951, report A. G. Mueller and D. F. Wilken, University of Illinois farm management specialists, in the recently published summary of Illinois farm business records.

Sizable increases in grain inventories accounted for most of this gain. Operating expenses and depreciation also advanced by 6 percent during the year.

On grain farms, 1963 net earnings were only $5 per farm lower than those in 1962. Increased crop inventories from excellent yields were offset by lower cash sales of livestock on these farms. Operating expenses fell but were still 14 percent above the 1951-63 average.

On hog farms, earnings continued at a high level for the third year in a row, being only $110 per farm below the 1962 figure. They were 48 percent above the 1951-63 average and more than $1,100 higher than the returns on hog farms of comparable size in the more productive areas of northern Illinois.

Market prices for hogs were lower, but increases in sales of grain crops and grain inventories offset the lower income from hog sales. Operating expenses and depreciation advanced by 13 percent, but the increased value of farm production nearly offset the higher costs in 1963.

The complete summary of Illinois farm business records has been published as Circular 891. Copies are available from farm advisers and the College of Agriculture, University of Illinois, Urbana.

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CGW:je
9/22/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Sign-Up Period For Wheat Growers Ends October 2

URBANA--Winter wheat growers in Illinois interested in taking part in the voluntary 1965 wheat program must sign up at their local ASCS office by Friday, October 2, according to D. E. Erickson, University of Illinois extension specialist in farm management. This is the final day of the only sign-up period.

While the operation of the 1965 program will be generally the same as that in 1964, some provisions have been modified. These changes provide several alternatives for the wheat farmer.

Erickson says:

1. The farmer can produce in excess of the allotment. Since no price support is available, market prices will determine his gross returns.

2. He can produce wheat within the allotted acres, diverting acres equal to 11.11 percent of the allotment to conserving uses. Payments include price supports based on a national average of $1.25 per bushel ($1.32 per bushel is the state average), domestic certificates at 75 cents per bushel on 45 percent of normal production, export certificates at 30 cents per bushel on 35 percent of normal production and either market prices or the loan rate for wheat.

3. He can divert 10 percent of the allotment to conserving uses plus the 11.11 percent minimum diversion. In addition to price support and certificates, he will receive a diversion payment of

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50 percent of the county price support times the normal production on the additional 10 percent diversion only. The average diversion payment in Illinois is $22.44 per acre.

4. He can divert 20 percent of the allotment to conserving uses plus the 11.11 percent minimum diversion. On less than 15 acres, the entire allotment can be diverted.

5. He can produce up to 50 percent above the allotment and store under bond the amount above normal production. There are restrictions on this alternative that he should investigate before he signs up for the program.

6. He can produce under the substitution provision that applies when a farmer complies with both wheat and feed grain programs. This permits the producer with both a wheat allotment and a feed grain base to combine his allotments and produce either wheat or feed grains.

For the farmer who grows spring wheat in a predominantly winter wheat area, the ASCS suggests that the best sign-up time still is before October 2. He can change his cropping intentions any time before the close of the feed grain sign-up next spring. In addition, he is qualified to take advantage of the provision of substituting feed grain for wheat and wheat for feed grain.

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9/25/64

FOR IMMEDIATE RELEASE

Calves Were More Profitable Than Fed Cattle In 1963

URBANA--A close look at last year's production records in Illinois shows that farmers could make more money by selling their beef calves at weaning than by carrying them on to slaughter weights.

A. G. Mueller and D. F. Wilken, University of Illinois professors of farm management, reach this conclusion in the recently published "Summary of Illinois Farm Business Records."

The U. of I. economists point out that in 1963 farmers who sold calves and those who sold cattle at slaughter weights both received $19 per cow above the value of feed fed.

When expenses are deducted for added labor, buildings and capital needed to raise slaughter cattle, the profit margin falls below that for calves sold at weaning.

The relatively unchanged size of cow herds on all farms (from 25 cows in 1956 to 27 in 1963) reflects the decision of most Illinois farmers to maintain a beef-cow herd as a supplemental enterprise to market nonsalable feeds and labor.

Returns per $100 feed fed to beef-cow herds in 1963 averaged $117. This average was the lowest since 1956--the last year in a five-year period when returns per $100 feed fed remained below $100.

Since returns per $100 of feed fed to feeder cattle have averaged only $116 in Illinois over the past five years, cow herds could be entering a period of less demand for feeders and still lower returns, say Mueller and Wilken.

The complete summary of Illinois farm business records has been published as Circular 891. Copies are available from farm advisers and the University of Illinois College of Agriculture, Urbana.

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CGW:ml
9/25/64

FOR IMMEDIATE RELEASE

Study Team Meets On Extension Relationships

URBANA--Initial plans for reviewing the relationship of the Illinois Cooperative Extension Service with the various farm organizations of the state have been completed by a special study team.

Appointed by Secretary of Agriculture Orville L. Freeman and University of Illinois President David D. Henry, the study team met last week on the U. of I. campus and elected Shannon McCune chairman. McCune is a staff associate in the office of President Henry.

Other members of the group are Herbert R. Albrecht, president, North Dakota State University; Richard Ballard, auditor, USDA Inspector General's Office; Leslie E. Card, emeritus head of the U. of I. Department of Animal Science; William Lavery, field representative, Federal Extension Service; and Raymond E. Seltzer, vice president, Agri-Research, Inc., Manhattan, Kansas.

McCune reports that Agri-Research, Inc., has been commissioned to survey selected groups who are familiar with the background of the Cooperative Extension Service in the state.

The study team expects to visit a number of counties throughout the state and to commission intensive studies in selected counties in order to review at first hand the existing relationships of the Extension Service with groups and agencies within the counties.

The study team also plans interviews with the heads of various farm organizations of the state and with other interested agricultural leaders.

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McCune pointed out that any individual should feel free to submit pertinent comments or information that would benefit the work of the study team. Such comments and information can be addressed to him at 333 Illini Union, University of Illinois, Urbana.

In their meeting last week, team members reviewed the objectives of the study with President Henry; Dean Louis B. Howard of the College of Agriculture; Dr. N. C. Brady, director of science and education, Department of Agriculture; and Dr. Lloyd Davis, administrator, Federal Extension Service.

The study team also reviewed background records and reference materials assembled by Dr. J. B. Claar, associate director of the Cooperative Extension Service.

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HR:ml
9/25/64

FOR IMMEDIATE RELEASE

More AI In Illinois DHIA Herds

URBANA--Dairy artificial insemination is on the upswing in Illinois DHIA herds--and it seems to be paying dividends.

University of Illinois extension dairy scientist Jerry Cash says 64 percent of all Illinois DHIA members bred more than 75 percent of their cows artificially last year. Eighty-eight percent used AI service for at least one cow during the year.

Records from these herds show that conception rates were about equal for cows bred naturally and those that were inseminated, Cash explains.

Cash says the 1963-64 DHIA summary also shows that average milk production was higher in DHIA herds where more than 25 percent of the cows were bred artificially than in herds where less than 25 percent or none of the cows received AI service.

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HDN:ml
9/25/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Economist Says Boxcar Shortage Really A Corn Overage

URBANA--The major problems of the past two corn harvests were caused not so much by a boxcar shortage as by a corn overage.

This is the opinion of T. A. Hieronymus, University of Illinois specialist in grain marketing.

"The statistics on the number of boxcars indicate that we did not have a boxcar shortage in the falls of '62 and '63," Hieronymus says "Rather, we had a rapid harvest of large corn crops, mostly wet, shelled corn."

In the past, Hieronymus says, farmers waited to harvest corn until it was dry enough to keep and then stored it in slat cribs, where it further conditioned itself for indefinite storage after it was shelled. In other words, they harvested a storable product.

"Now with the change to corn combines," Hieronymus says, "we are harvesting a non-storable product that is incapable of self-conditioning or automatic improvement in keepability."

"This change requires a new technology of conditioning and storage," he says. "The choice of location for this job is, I believe, between farms and country elevators because I do not think that it is economically possible or likely that enough transportation will be available to move corn out of the country at harvest time fast enough to solve the problem."

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While the experience of last fall is not a completely reliable guide to this fall, here is the way the situation looks at this time, Hieronymus says:

1. What the total number of corn combines will be this year is not known, but as use of combines continues to increase, it appears likely that harvest receipts will be a high percentage of the total receipts for the year.

2. Railroads say they are better prepared to handle the problem this year than before.

3. There are more facilities on farms and at elevators to dry and store corn this year.

4. This fall the moisture content of corn at harvest is more normal than it was last year, when the weather was unusually dry and moisture content at harvest was low.

5. Intermittent rain could slow the harvest, keeping the corn from reaching the elevators and transportation facilities with such force as in the past.

6. This year the crop is not so large as that of 1963.

Some of these factors would indicate a smaller problem this year than last, Hieronymus says, but other factors counterbalance this idea. The problem will probably repeat itself.

After experiences of the last two harvest seasons, Hieronymus says, most farmers recognize the problem and know what to do about it in terms of engaging elevator space in advance, deciding how to handle their corn in terms of selling and storing and arranging for on-the-farm storage.

But whether they plan well enough in advance and follow through with these plans will determine how well they solve their individual problems at harvest time, Hieronymus says.

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10/6/64

FOR IMMEDIATE RELEASE

Farmers, Elevator Operators Must Cooperate To Manage Corn Harvest Problems

URBANA--Cooperation and advance planning can help farmers and elevator operators better manage the problems that develop each year at the peak of corn harvest, says Harvey P. Myers, manager, Stonington Cooperative Grain Company.

Myers was a featured speaker during the Agricultural Industries Forum sponsored this year by the University of Illinois College of Agriculture Extension Service and Department of Agricultural Economics.

"This corn harvest problem is going to be with us for some time," Myers says. "Corn yields will continue to increase just as harvest methods will continue to speed up. With the old conventional cornpickers, around 800 to 1,000 bushels could be picked each day. But now some of these farmers who have four-row picker-combines can pick about 4,000 bushels a day."

It is not economically possible for railroads to tool up for this sudden push during harvest season, Myers believes. Nor is it economically possible for the local elevators to carry the full load.

"In my opinion," Myers says, "the elevators must keep up in providing improved facilities for conditioning and storing corn, but the farmer also must help by increasing his storage space and making better use of it.

"One important thing a farmer can do before harvest," Myers says, "is to contact his local elevator operator, telling him how much corn he will be bringing in. He should ask specifically what the elevator will do when the boxcar shortage hits the area."

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"If the farmer agrees to sell to the elevator, will the elevator accept the corn or refuse it when the pressure is on? Last year some elevators accepted the corn and piled it on the ground when elevator space ran out. On the other hand," Myers says, "some elevators felt they had to refuse the corn, leaving many farmers stranded and unhappy."

By having a clear understanding now, Myers says, the farmer still has time to shop around and arrange for temporary storage before the boxcar shortage occurs. Myers, 1963 president of the Managers Club of the Farmers Grain Dealers Association, believes that the shortage may develop as early as mid-October because of continued dry weather. Now is the time to plan to meet the problem, he says.

If commercial storage is not available within a reasonable distance, a farmer may arrange to use a neighbor's extra bins, Meyers suggests. If that is not possible, he may have to plan for temporary on-the-farm storage for at least a month until the elevators are back in full operation.

"Corn for temporary storage should be drier than normal if it is to keep," Myers says. "A farmer may be able to hire an elevator to dry his corn for this temporary storage, or he may provide a makeshift fan-drying system in barn or crib driveways."

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JAP:ml
10/6/64

FOR IMMEDIATE RELEASE

UI Ag Engineer Gives Pointers For Emergency Corn Storage

URBANA--Farmers who are wondering where to store their corn if shelled corn transportation bogs down as it did last year might look to the machine shed or crib and barn driveways for temporary storage.

A moisture barrier will be necessary to protect the corn if these areas have dirt rather than concrete floors, explains University of Illinois agricultural engineer Frank Andrew. He says some of the new plastics are good for this purpose and are low in cost.

"Ten dollars will buy about 1,000 square feet of 4 mil. plastic," Andrew explains. "Two strips measuring 10' x 50' each, used together, will give floor protection for 1,500 bushels of shelled corn at a cost of about 3/4 cent a bushel."

For long-term storage, corn should have a moisture level of 12 to 13 percent. If it can be dried commercially to this percentage, farmers can use temporary on-the-farm storage longer with less gamble.

The higher the moisture content and temperature, the shorter the successful storage time, Andrew says. Clean shelled corn from the field with 18 percent moisture, stored and maintained at 70° F. or less, will keep for about 30 days. Corn with 24 percent moisture will keep for only five days at 70° F.

Corn with 18 percent moisture stored and maintained at 55° F. or less will keep about 90 days. At a moisture content of 20 percent, it will keep about 35 days at 55°. At temperatures as low as 45°, it will keep for about 120 days at a moisture level of 18 percent.

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"Of course, these moisture content—storage length relationships are difficult to pin down accurately because of the number of variables involved," Andrew explains.

"For example, under similar storage conditions 18 percent corn picked early in the morning when the outside temperature is 50° may keep somewhat better than the same corn picked in the afternoon when temperatures are in the 70s."

Andrew says farmers who are using on-the-farm storage should remember that most machine sheds and driveway walls are not stressed for grain pressure. To avoid damage to buildings, grain should be piled on the floor and allowed to find its own slope.

Self-supporting portable walls, developed at the U. of I., can help to strengthen such buildings as machine sheds, cattle sheds and garages for corn storage. These portable walls are simple to build, and they can be used in pole frame, rigid frame or stud-constructed buildings. They consist of two panels braced together to form a large capital "L". The panels are not attached to the building. Instead, they're held in place by the grain's weight.

Farmers who would like further information about the self-supporting portable walls should contact their farm adviser or write to the U. of I. College of Agriculture for the leaflet "Self-Supporting Portable Walls for Grain Storage."

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10/6/64

FOR IMMEDIATE RELEASE

Note to Editors: List of exhibitors for local fill-in is attached.

Work Of Local Artist Wins A Place In State Art Show

URBANA--Of the 5,000 amateur artists who entered local and district Town and Country Art Exhibitions, ______________________ of ______________________ was among the 96 finalists. His (her) work will be exhibited at the ninth annual Town and Country Art Exhibition at the University of Illinois Architecture Building Gallery, Urbana, October 18-31.

Seven U. of I. jurors and 21 art critics from cooperating state colleges and universities selected 616 junior and adult division winners at the 38 local and area exhibitions. These winners then entered 448 works of art in the four district shows, from which jurors selected 108 works by 96 artists to be displayed at the state exhibit on the U. of I. campus.

District shows were held on the campuses at Western Illinois State University, Northern Illinois State University and Millikin University. Southern Illinois University cooperated in the judging and hanging of the exhibition in the Mt. Vernon Security National Bank Gallery.

The Architecture Building Gallery will be open Sundays from 2 to 5 p.m., weekdays from noon to 4:30 p.m. and Saturdays from 9 a.m. to 4:30 p.m.

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10/8/64

Exhibitors
Ninth Annual Town and Country Art Exhibition
October 18-31, 1964

Mrs Eileen Ammon
Route 1
Carmi (WHITE)

Mrs. Jane (Donald) Atkins
323 East College Street
Jacksonville (MORGAN)

Miss Mildred Anne Baker
613 South 16th Street
Mt. Vernon (JEFFERSON)

Mrs. Gloria (C. W.) Barenfanger
212 West Grandview Drive
Vandalia (FAYETTE)

Miss Ruby Beck
Cowden (SHELBY)

Mr. Larry L. Benoche
347 North Prairie Street
Bradley (KANKAKEE)

Mr. Daniel K. Bleck
2400 Atlantic Avenue
Waukegan (LAKE)

Mrs. Tony (George) Blissett
22940 State Street
Chicago Heights (COOK)

Mrs. Josepha G. Borrowman
Box 147
New Canton (PIKE)

Mrs. Virginia (Edwin J.) Bouchard
Route 6
7116 North Rockton Avenue Road
Rockford (WINNEBAGO)

Mrs Olive Brass
245 South Jackson Street
Pittsfield (PIKE)

Miss Jean Brunner
900 South Poplar Street
Pana (CHRISTIAN)

Mrs. Mary Ann Buck
50th and Payson Road
Quincy (ADAMS)

Mrs. Anne Burdick
209 West Chestnut
Mt. Sterling (BROWN)

Mr. Harry K. Burmeister
495 West St. Charles Road
Elmhurst (DU PAGE)

Mrs. Leeta Casada
2807 Mannen Street
Mt. Vernon (JEFFERSON)

Miss Jennie Cell
Route 1
Charleston (COLES)

Mr. Jacques A. Chevalier
701 Sumac Parkway
Waukegan (LAKE)

Mr. Oscar O. Churchill
Route 1
Springfield (SANGAMON)

Mrs. Anne T. Conness
141 East Jones Street
Ottawa (LA SALLE)

Mrs. Nellieanne Cox
201 South Sixth Street
Wyoming (STARK)

Mrs. Roy R. Curtis
Route 2
Milan (ROCK ISLAND)

Mrs. Audrey (James) Davidson
412 North Seventh Street
Marshall (CLARK)

Mrs. Ruth Davies
610 Juliet Road
Peotone (WILL)

Mrs. Wilma DeFord
321 North Broadway
Lewistown (FULTON)

Mr. Victor DeGraff
5274 Meyer Drive
Lisle (DU PAGE)

Mrs. Gretchen M. (W. A.) Dennis
Route 3
Paris (EDGAR)

Mrs. Marion Deushane
St. David (FULTON)

Mrs. Mary Lou (Ben) Dick
114 West Center Street
Itasca (DU PAGE)

Mrs. Maurine Driscoll
180 West Wing Street
Bement (PIATT)

Mrs. Laura F. (Bruce) Duncan
903 South Hale Street
Wheaton (DU PAGE)

Mrs. Florence (Percy Wm.) Eckwall
455 Sunnyside Avenue
Elmhurst (DU PAGE)

Mrs. Marylin (Raymond D.) Erickson
321 Sheridan Street
Rockford (WINNEBAGO)

Mrs. Mary (William) Everham
430 North Oak Street
Itasca (DU PAGE)

Miss Kay Fosdyck
618 South Johnson Street
Macomb (MC DONOUGH)

Mrs. Mae (Harold F.) Frederick
10912 McConnell Road
Woodstock (MC HENRY)

Mrs. Ann D. (Gerald) Freiburg
424 Evergreen East
Quincy (ADAMS)

Mrs. Gertrude Gamel
R.F.D.
Alpha (HENRY)

Mrs. Gertrude Gladstone
1614 North Richmond Road
McHenry (MC HENRY)

Mrs. Barbara Gradert
622 South Oakwood Avenue
Geneseo (HENRY)

Mrs. Helen Grant
802 East Main Street
Streator (LA SALLE)

Mrs. Anita Guerra
61 North Ela Road
Barrington (LAKE)

Mr. Virgil Hager
116 South Hudson Street
Stockton (JO DAVIESS)

Mrs. Grace (William C.) Hartwig
4507-18th Avenue
Rock Island (ROCK ISLAND)

Mrs. Florence A. (Will C.) Hill
Route 2
Stockton (JO DAVIESS)

Mrs. Bernice Hoeferlin
327 North Pine Street
Momence (KANKAKEE)

Mrs. Mary Ellen Hoffman
Route 4
Pana (CHRISTIAN)

Miss Joyce Holloway
380 West Cherry Street
Winchester (SCOTT)

Mr. Emory Q. Irwin
Route 1
Petersburg (MENARD)

Mr. Bob Jackson
3245-26th Street
Rock Island (ROCK ISLAND)

Mrs. James D. Koutny
5740 Hillcrest Road
Downers Grove (DU PAGE)

Mrs. Anna (Courtney) Leonard
Route 1 Mill Road
Cherry Valley (WINNEBAGO)

Mrs. Lyn Lingle
930 Jefferson Street
Hillsboro (MONTGOMERY)

Mrs. Louise (Paxson) Link
Shadowbrook
Paris (EDGAR)

Miss Chloe E. Luett
121 Carroll Avenue C-5
DeKalb (DE KALB)

Mrs. Clementine (J. R.) Marquiss
405 North State Street
Monticello (PIATT)

Mrs. Edith McCutcheon
208 West Carter Street
Cerro Gordo (PIATT)

Mrs. Ellen M. McDowall
Route 2, Box 59
Antioch (LAKE)

Mrs. Vera (Kenneth) McKinley
123 Eastern Avenue
Clarendon Hills (LAKE)

Mrs. Alice (C. R.) Melton
Box 714
Quincy (ADAMS)

Mrs. Marie (James A.) Miles
309 South Jackson Street
Pittsfield (PIKE)

Mrs. Joyce M. Miller
Route 1
Franklin Grove (LEE)

Mr. John S. Miskinis
921 Lake Street
Kewanee (HENRY)

Mrs. Jo (Alson W.) Modert
15 Northbrook Drive
Mt. Vernon (JEFFERSON)

Miss Ann Morris
120 Ellendale Road
Deerfield (LAKE)

Mrs. Dorothy Parkinson
320 East Summit Avenue
Stockton (JO DAVIESS)

Mr. Floyd W. Parks
116 Apple Lane
Anna (UNION)

Mrs. Dee (George) Pasternak
806 South Loomis Street
Naperville (DU PAGE)

Mr. James E. Pearson
Box 117
Ringwood (MC HENRY)

Mrs. Bernice J. (Walter R.) Peterson
Route 3
Milan (ROCK ISLAND)

Mrs. Harriet (Ross) Pierce
526 North Simmons Street
Stockton (JO DAVIESS)

Mrs. C. Frances (Gilbert H.) Racster
636 Oak Street
Carmi (WHITE)

Mrs. Carolyn Ranft
108 High Street
Winchester (SCOTT)

Mrs. Helen (B. H.) Redman
411 East Court Street
Paris (EDGAR)

Miss Louise G. Ring
211 West Elizabeth Street
Paris (EDGAR)

Mrs. Ann F. Rund
Ivesdale (PIATT)

Mrs. Carol (Vanderbeek) Schmidt
Route 2, Barber-Greene Road
DeKalb (DE KALB)

Mr. Max P. Schreiner
26 Hillcrest Court
Rock Island (ROCK ISLAND)

Mrs. Marion N. Scott
1617 East Elmwood Street
Jacksonville (MORGAN)

Mrs. Beryl (Earl L.) Stewart
57 East Green Street
Champaign (CHAMPAIGN)

Mrs. Mildred R. (J. D.) Stewart
Route 4
Paris (EDGAR)

Mrs. Ruth (Jesse L.) Stites
2004 Hemlock Drive
Champaign (CHAMPAIGN)

Mrs. Sue Stotler
704 North Oak Street
Benton (FRANKLIN)

Mrs. Eunice (Adlai) Taylor
Route 1
Cerro Gordo (PIATT)

Mr. Arlie Tempel
16 Crestview Drive
Decatur (MACON)

Mrs. Leone Thompson
407 East Lincoln Street
St. Joseph (CHAMPAIGN)

Mr. Ralph D. Thompson
993 East Ash Street
Canton (FULTON)

Mrs. Jackie Trainer
Route 5
Greenville (BOND)

Mrs. Rosemary Miller (W.) Walker
903 East Chamberlin Street
Dixon (LEE)

Mrs. Inex Walldan
1929 Park Drive
Grandwood Park
Gurnee (LAKE)

Mrs. Miki (Patrick K.) Watson
317 North Fair Street
Champaign (CHAMPAIGN)

Miss Carole Weaver
2000-16th Avenue
Rock Island (ROCK ISLAND)

Mrs. Mae Weidhuner
309 South Eighth Street
Petersburg (MENARD)

Mrs. Lori (Richard) Wilhelm
3412 Fairway Drive
McHenry (MC HENRY)

Mrs. Gladys P. Williams
Route 5
Carmi (WHITE)

Mrs. Martha Worley
326 North Harrison
Litchfield (MONTGOMERY)

10/5/64

FOR IMMEDIATE RELEASE

Sixteen Illinois Future Farmers To Receive The American Farmer Degree

KANSAS CITY, MO.--Sixteen Illinois members of the Future Farmers of America will receive the coveted American Farmer degree Wednesday afternoon, October 14, during the 37th annual national FFA convention in the Kansas City Municipal Auditorium.

The American Farmer degree, the highest achievement degree in the FFA, is given by the national FFA to one in about 1,000 members. Each degree winner receives a gold key and certificate from the FFA and, if he attends the convention, a check from the Future Farmers of America Foundation to help pay his travel expenses.

An American Farmer must have earned at least $1,000 from his supervised farming program started while taking vocational agriculture in high school. Candidates for the degree must show outstanding scholarship, cooperation, thrift and leadership abilities through participation in FFA, school and community activities.

America Farmers from this area are: (Please see attached list).

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10/13/64
NO

American Farmer Degree

	Name	Home Town
1.	Donald Butler	Pittsfield
2.	Jack Corum	Champaign
3.	Phillip W. Freesmeyer	Hamburg
4.	Ronald L. Gehrig	Wyoming
5.	Richard Jenkins	Ransom
6.	LeRoy Klitzing	Altamont
7.	Victor Korves	Waterloo
8.	Frederick M. Mohr	Homer
9.	Gary H. Moody	Dalton City
10.	Lester Potts	Williamsfield
11.	Ted Pyatt	Pinckneyville
12.	Raymond W. Ramsdell	Franklin Grove
13.	Ron Scherer	Claremont
14.	Kent F. Slater	Augusta
15.	Charles T. Trader	Scheller
16.	George D. Wyciskalla	Scheller

FOR RELEASE THURSDAY A.M., OCTOBER 15, 1964

NATIONAL FFA CONVENTION NEWS

Illinois FFA Chapters Win National Recognition

Two Illinois chapters of the Future Farmers of America were among 69 chapters honored at the 37th annual national FFA convention in Kansas City Wednesday night, when "Gold Emblem" awards were presented in the organization's National Chapter Award Program. The Maroa Chapter, Maroa, and Williamsfield Chapter, Williamsfield, each received the gold emblem.

Thursday morning "Silver Emblem" awards were presented to 58 chapters, and "Bronze Emblem" to 12. The Central and Sycamore chapters received the silver emblem.

These awards were made for outstanding activity records during the 1963-64 school year. Each chapter also received a special plaque or, if they had received a plaque in former years, a spur to attach to the plaque.

The Future Farmers of America has approximately 8,500 local high school chapters, with associations in 49 states and Puerto Rico. Each state FFA association was permitted to enter two or more chapters, depending upon state FFA membership, in the national contest. Judging was done by staff members of the Agricultural Education Branch of the U. S. Office of Education, Department of Health, Education and Welfare.

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10/13/64
NO

FOR IMMEDIATE RELEASE

Farm Management Fieldmen To Meet With Extension Specialists October 28-30

Thirty-nine Farm Bureau Farm Management fieldmen are expected to meet with specialists of the University of Illinois Cooperative Extension Service and Department of Agricultural Economics October 28-30 in Springfield and Urbana for the annual fall conference to discuss the latest information and techniques in farm management.

A discussion of changes in income tax laws and a tour of Internal Revenue Service facilities will be features of the first session in Springfield on October 27, reports D. F. Wilken, state leader of fieldmen. All other sessions of the conference will be in Urbana.

"Farm Costs - Where and How Much to Spend?" is the theme of the session on October 28 in Urbana. Business affairs of the farm management program are scheduled for discussion on October 29. "Our Changing Beef Industry and How It Affects Illinois Farmers" is the general topic for discussion on October 30.

Lawrence W. Olson, University of Illinois Department of Speech and Theater, will speak at a dinner in the Tilden Hall Hotel on October 29. "Communications - How?" is his topic.

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10/13/64

FOR IMMEDIATE RELEASE

U. of I. Ag. Industries Forum Scheduled For February 2-3

URBANA--The 7th University of Illinois Agricultural Industries Forum has been set for February 2-3 at the Illini Union in Urbana, reports Harold G. Halcrow, head of the Department of Agricultural Economics.

J. R. Roush, Department of Agricultural Economics, is general chairman of the 1965 Forum.

In addition to general sessions, special programs are tentatively scheduled for those interested in the marketing of dairy products, egg and poultry marketing, livestock marketing, grain, feed and other farm supplies.

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10/13/64

FOR IMMEDIATE RELEASE

Special to Farm Advisers

"Crop Watching" Pays

Now that the corn crop is made, you can be looking for ways to boost next year's profits by doing some intensive "crop watching," says ________________ County Farm Adviser ________________. Here are some things to look for:

Are there many broken or root-lodged stalks? These may have been due to root damage caused by cultivation, disease, insects or a weak variety.

Are there spots in your field that need drainage? Surface drainage will pay in tight soils, which are common in many areas of the state. Tile alone doesn't always do the job.

Is fertilizer well balanced? Look for hunger signs. Kernels absent at the tip mean that nitrogen is lacking. Phosphorus-deficient ears are normal length but have chaffy kernels. Potassium-deficient corn has curled ears, poorly filled on one side.

Is the plant population right? The ears on most hybrids usually average about 8 ounces. If they are larger, the population is too thin. If they are smaller, it is too heavy.

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JJF:ml
10/15/64

FOR IMMEDIATE RELEASE

Special to Farm Advisers

Check Death Losses In Flock Or Herd With Veterinarian

When unusual death losses occur in your flock or herd, the first step in determining the cause is to call in a qualified local veterinarian, says ______________ County Farm Adviser ______________.

It is possible, also, to send one or more specimens to the diagnostic laboratory, College of Veterinary Medicine, Urbana, for free diagnostic service.

Often the University of Illinois Department of Animal Science receives requests for chemical analyses of samples of commercial or farm-produced feeds, ______________ says. Farmers suspect that the feed may be toxic, causing livestock loss. While routine analysis will determine the amount of protein, nitrogen-free extract, fat, fiber, ash and dry matter in the sample, ______________ says it will not reveal the presence of poisonous materials.

For the most part, suspected feed samples sent in for examination are perfectly wholesome in appearance and odor and could not account for poor performance or excessive death losses over a short period, ______________ says.

If there are strong reasons to suspect that the feed is toxic, an easy way to test it without endangering all the herd or flock is to feed it to a few young, healthy chicks for a period of about a week, ______________ says. Any ill effects resulting directly from the feed can be detected in this manner.

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Since the primary purpose of the University's laboratories and funds is for teaching and research, according to R. O. Nesheim, head of the Department of Animal Science, the University cannot undertake to make routine feed analyses on an individual request basis, _______________ says. However, commercial laboratories are equipped to make such analyses for a fee.

_______________ says that the Illinois Department of Agriculture is assigned by law to control and regulate feedstuffs. Therefore, all commercial feeds distributed in Illinois must be registered and sold under the provisions of the rules specified by state regulations.

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10/15/64

FOR IMMEDIATE RELEASE

Special to Farm Advisers

Keep Safety Shields In Place

In this busy fall work season, it's smart to play safe by having all safety shields in place on power take-offs and other moving farm machinery parts.

The stakes are too high for you to gamble against having an accident by working around machinery without guards, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. If you lose, it's too late to be sorry.

Get standard power take-off hitches and shields from your machinery dealer, Hogsett suggests. But even the best shield will not protect you if you don't put it on.

Some manufacturers are putting on nonremovable power take-off shields to help protect operators against negligence. You can open these shields for servicing or inspection.

Remember that accidents don't respect age or experience, he concludes.

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10/15/64

FOR IMMEDIATE RELEASE

Morrow Plots Yield Well Despite Weather

URBANA--Soil geared to maximum production "kicked out" near-record yields again this year at the famed Morrow Plots here despite less-than-optimum weather. Plots in top physical condition with adequate nutrients made the most of available moisture, reports Al Lang, agronomist in charge of the oldest research plots in the United States.

Scientists started the plots in 1876 to settle a discussion about whether rich central Illinois soils could be worn out. This year's results show that these soils take a great deal of "wearing" and dramatically underscore the tremendous yielding power of good Illinois soils and hybrids when combined with proper fertility and other good corn-growing practices, says Lang.

This year's highest yield on the plots--146 bushels per acre--equaled the all-time high set in 1958, an ideal corn year. The record yield came from plots receiving manure, lime and phosphorus with a rotation of corn, oats and clover. The 1958 record came from a plot in a corn-oats-clover rotation untreated before 1955 but receiving lime, nitrogen, phosphorus and potassium since that date. This year's yield from this LNPK plot was 144 bushels. This yield was second high on this plot, which has been treated with manure, lime and phosphorus since 1904 and NPK since 1955. The highest yield on the MLP plus NPK plot was 144 bushels, also recorded in 1958.

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An unfertilized plot in the corn-oats-clover rotation produced 71 bushels.

With one exception, all of the continuous corn plots produced less corn this year than in 1963, when rain came "about five minutes before corn really started hurting." On an untreated plot growing corn since 1888, the yield was 47 bushels, a bushel less than last year. A continuous corn plot treated with LNPK since 1955 made 110 bushels this year contrasted with 124 bushels last year. A continuous corn plot getting MLP since 1904 dropped 10 bushels from the 1963 yield to 79 bushels this year. Yields increased--from 119 bushels in 1963 to 126 bushels this year--on a continuous corn plot under an MLP treatment since 1904 with NPK added since 1955.

For the first time in the long history of the famed plots, classification experts are taking soil profiles to determine the effect of various treatments on corn root penetration. Agronomists noted increased "firing" of corn in the southwest corner of the plots, where the subsoil contains a higher-than-average amount of sand.

This year's yields are all the more outstanding, says Lang, considering the weather during the growing season. While the total rainfall during the corn-growing season differed only slightly from last year, the distribution varied widely.

According to Stanley Changnon, climatologist at the State Water Survey, rainfall totaled 7.87 inches during the critical 1963 growing period--July and August--and 11 inches for the May to August period. Monthly rainfall was .9 inch in May, 2.26 inches in June, 4.32 inches in July and 3.55 inches in August.

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During the 1964 corn-growing season, only 5.0 inches fell during July and August--2.41 inches in July and 2.59 in August. Even more important, Changnon points out, all of the July rainfall came during the first two weeks of the month, and August rainfall came during the last two weeks. Rainfall for the May-to-August period totaled 10.78 inches, with .58 inch coming in May and 5.2 inches in June.

Mean temperatures during July and August were only slightly higher this year. The July 1963 mean was 74 degrees; this year's July mean was 75.7. Last year the August mean was 70 degrees; this year's mean was 72.7, Changnon points out.

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JJF:ml
10/16/64

FOR IMMEDIATE RELEASE

Farm Census Requires 25,000 Workers To Collect Information On Agriculture

URBANA--The United States Department of Commerce estimates that about 25,000 census workers will be needed to help the Census Bureau take the Census of Agriculture scheduled for November and December, reports Charles Whalen, University of Illinois agricultural law specialist.

The 1964 farm census, the 18th in United States history, is intended to collect accurate, up-to-date information about agriculture throughout the country, Whalen says. It will include an inventory of all farms, showing the amount of land used for crops and pasture, quantity of crops harvested, number of poultry and livestock on farms, kinds of equipment that farmers have and the number and characteristics of people who live on farms.

About 1,800 local supervisors, called crew leaders, are now being selected to take charge of the enumeration. After their training period, these leaders will recruit about 23,000 census takers, called enumerators. Each district in Illinois will need from seven to 15 enumerators, Whalen says.

An enumerator will be assigned to cover one or more townships or similar local areas. His job will be to find and visit each place with agricultural operations in his area and get the required census information.

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Enumerators will be trained in census taking through a home self-study. They must pass a written test before being eligible for appointments, which are then subject to review by the census regional office, Whalen says.

About three weeks' work--8 hours a day, 40 hours a week--will be required of an enumerator. Pay is on a piece-rate basis for completed questionnaires and listings of dwellings. In cities and thickly populated urban areas, enumerators will be paid by the hour. A rate of 8 cents a mile will be paid for use of an automobile on official census travel.

Persons who have a knowledge of farming and farm operations and are interested in working as census enumerators should apply to local crew leaders, Whalen says. Crew leaders will be announced in local newspapers as soon as they have been hired and trained by agricultural field assistants.

Field assistants for Illinois are James E. Capps, 614 South 24th Street, Mt. Vernon; David K. Funk, 1718 Bates Avenue, Springfield; Robert D. Lichty, R. 1, Box 60, Lanark; Francis Joseph Joyce, R. 1, Essex; and James Gwartney, Room 100, 536 S. Clark Street, Chicago.

Additional information about qualifications for enumerators can be supplied by the field assistants, Whalen says.

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10/20/64

FOR IMMEDIATE RELEASE

"Galloping Technology" Makes Periodic Farm Census Important

URBANA--The "galloping technology" that has produced machines to replace millions of men, horses and mules on farms in this country makes it important and necessary to take a periodic inventory of agriculture, says Charles Whalen, University of Illinois agricultural law specialist.

The 1964 Census of Agriculture, designed to determine how and where farms and farmers have changed, will get under way in November.

While the Census Act requires all farmers and ranchers to answer questions asked by the Census Bureau, it also protects farmers by making census information confidential, Whalen emphasizes. Facts can be used only for statistical purposes, and no information can be revealed about an individual farmer or farm.

This year the census is partly do-it-yourself to save time and effort, Whalen says. Illinois farmers are asked to fill out questionnaires mailed to them by the Census Bureau during the week of November 16. The form will be collected one to three weeks later during a personal visit to the farmer by a census enumerator. At that time the farmer can get any help he may need in completing the form, Whalen says.

Anyone who operates a farm or ranch must fill out a questionnaire. This classification includes any person who in 1964 had four or more hogs, 30 or more chickens or 20 or more fruit trees or grapevines, or who harvested any crops, such as corn, hay, wheat or vegetables, for commercial sale, or any nursery or greenhouse products, Whalen says.

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Census questions are clear, simply worded requests for facts about 1964 farming operations, Whalen says. The questionnaire is aimed at furnishing an inventory of land, livestock and farm facilities and equipment, a record of crops harvested and sold, and records of selected production expenditures and of farm income, value and debt.

For the first time, farmers will be asked to report on use of chemical pesticides and on income from providing recreational services.

Also for the first time, no information will be requested on the numbers of horses or mules on U. S. farms.

While estimates of changes are made annually on the basis of samplings of farms, the only way these estimates can be kept in line with actual changes is by regular censuses of all farms, Whalen says. New information revealed through the cooperation of farmers can benefit them in making decisions, as well as anyone else who has an interest in the nation's agriculture.

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10/20/64

FOR IMMEDIATE RELEASE

Illinois Livestock Judging Teams Win First At American Royal Livestock Show

URBANA--Illinois judging teams left their opponents struggling for second place in livestock judging at the recent American Royal Livestock Show in Kansas City. Both the University of Illinois and the state 4-H livestock judging teams walked off with first place in the contest.

The Illinois 4-H Livestock Judging Teams outpointed teams from 13 other states to win the contest for the second year in a row. Team members were Dale Schlipf, El Paso; Dave Down, Wyoming; Ron Walpole, Jacksonville; Eddie McMillan, Macomb; and John Reel, Congerville. Team coach was Melvin Fink, Clinton, U. of I. area livestock specialist.

As a team, the Illinois 4-H'ers placed first in both beef and swine judging. Individual honors went to Walpole, who placed first in judging beef and second in swine. Down placed first in judging swine, and Schlipf placed fourth in sheep.

The U. of I. Livestock Judging Team placed second in judging beef and swine, third in sheep and fifth in horses to win top honors in competition against 19 other colleges and universities.

Members of the U. of I. team were Tom Bidner, Mahomet; Richard Epley, Pana; Lynn Laible, Toluca; Albert Peter, Fowler; and Dean Stevens, Wapella. U. of I. livestock specialist J. E. Zimmerman was team coach.

Bidner was fourth high individual in the collegiate contest. He also placed fourth in judging beef. Stevens placed eighth in overall judging.

Next competition for both the 4-H and the U. of I. livestock judging teams will be at the International Livestock Exposition in Chicago during December.

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10/20/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Illinois Farms Emphasize High Cash Crops, Livestock

URBANA--Illinois farms became bigger and put more emphasis on high cash-value crops and livestock between 1951 and 1962, according to a recent study made by D. F. Wilken, University of Illinois farm management specialist.

The study was designed to show what farming adjustments had been made by a group of 198 farmers who stayed in business during this period.

From records kept by farmers enrolled in the Farm Bureau Farm Management Service, selected financial and production factors in the 1951-1953 period were compared with the same factors on the same farms in 1960-1962.

Results show that average acres per farm increased by about 15 percent in northern Illinois and by 12 percent in southern Illinois. Corn and soybeans were emphasized more in cropping programs, and large livestock enterprises increased. A large enterprise was defined as one with more than 20 dairy cows, 60 beef cattle, 60 litters of hogs or 750 hens per farm.

The average months of labor per farm changed very little, Wilken says. When measured in constant dollars, the combined effect of increased size of business and of automation on these farms increased the output per man by 60 percent in northern Illinois and nearly doubled it in southern Illinois.

Wilken says that these changes indicate the need for brain power in relation to muscle power for managing farms in the future.

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10/23/64

FOR IMMEDIATE RELEASE

36 County Advisers Win Communication Awards

URBANA--Achievement certificates were awarded to 36 county extension farm and home advisers and assistant advisers Wednesday morning for excellence in the 1964 Extension Communication Awards program.

Awards were presented by Hadley Read, extension editor at the University of Illinois College of Agriculture. Occasion was the annual conference of the Cooperative Extension Service at the University of Illinois October 20-23.

Certificate winners included J. Errol Baxter, Kane county assistant farm adviser; Mrs. Pearl W. Barnes, Ogle county home adviser; Harold A. Brinkmeier, Logan county farm adviser; Denver C. Corn, Sangamon county farm adviser; Ronald E. Cornwell, Marion county assistant farm adviser; Carolyn J. Calvert, Morgan-Scott county assistant home adviser; Calvin H. Cowsert, Franklin county farm adviser; Stanley R. Eden, Mason county assistant farm adviser; Margaret L. Esposito, McLean county assistant home adviser; Philip B. Farris, Kane county farm adviser; Hubert H. Fulkerson, Ogle county farm adviser; Earl D. Gilliland, Carroll county assistant farm adviser; and Byron W. Hutchins, Carroll county farm adviser.

Also, Kenneth R. Imig, Iroquois county farm adviser; Richard G. Kerr, Winnebago county farm adviser; Francis W. Kittinger, Hamilton county farm adviser; Jean K. Lystad, McLean county home adviser; William E. McAllister, White county farm adviser; Carl F. Mees, Cook county coordinator; Warren E. Meyers, Macon county farm adviser; Eugene G. Mosbacher, McLean county farm adviser; Raymond I. Mowers, Massac county

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farm adviser; George N. Myers, Scott county farm adviser; Donald T. Nelson, Ogle county assistant farm adviser; and James H. Neuschwander, Greene county farm adviser.

Also, George D. Perisho, Peoria county farm adviser; Wallace G. Ramsay, DuPage county farm adviser; Frances G. Reeverts, Lee county home adviser; Leslie W. Rogers, Marion county farm adviser; James T. Somers, Lee county farm adviser; W. E. Schmidt, DuPage county farm adviser; Mrs. Helen T. Sorensen, Cook county associate home adviser; H. Robert Wack, Stephenson county farm adviser; Mrs. Ruth O. Waterhouse, Stephenson county home adviser; A. A. Wicklein, Will county farm adviser; and Harry S. Wright, Pike county farm adviser.

A total of 65 farm and home advisers and assistants entered at least one information piece in one of the 13 classes of the award program. There were 155 entries from 41 different counties.

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10/23/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Shirley Whitchurch Named Southern Illinois Area Resource Development Adviser

URBANA--Shirley Whitchurch, Centralia, has been appointed by the University of Illinois Cooperative Extension Service as area resource development adviser for the southernmost 21 counties of Illinois.

Miss Whitchurch will be working with many groups in programs directed toward better family living, youth development and community improvement, as well as proper use of social and natural resources.

Miss Whitchurch will help southern Illinois home advisers make more effective use of radio and television in teaching better family living. She also expects to work directly with low-income families to help them stretch the food, clothing and housing dollars. For example, homemakers using "food stamps" can look to Miss Whitchurch for advice on how best to feed their families.

Miss Whitchurch attended Centralia Junior College. She earned her degree in home economics at Southern Illinois University and has studied further at Colorado State University.

In her new position, Miss Whitchurch will be part of the staff at the U. of I. Dixon Springs Agricultural Center at Simpson.

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10/23/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Economist Says Soybean Price To Remain Stable Until Supply-Demand Forces Become Clearer

URBANA--The price of soybeans appears to have reached a resting point, where it should remain until the supply and demand forces come into sharper focus later in the year, says T. A. Hieronymus, University of Illinois grain marketing specialist.

The situation is delicately balanced now, Hieronymus says. A little larger or smaller crop or export of oil could mean that the price might go up enough to ration oil use or go down to encourage more meal use.

Soybean prices will probably weaken if ultimate supplies are large enough for a crush of 470 million bushels, Hieronymus says. The crop was estimated at 699 million on October 23, with the final estimate due the third week in December. The carryover of old crop soybeans announced October 23 was 32 million. The best estimate of the total supply at this time, therefore, is 731 million bushels.

Seed and waste will take 45 million bushels, Hieronymus says. A minimum of 10 to 15 million bushels will be needed for carryover. Exports are estimated at about 205 million bushels. These amounts leave 466 million bushels available for crush.

New-crop soybean prices were $2.25 to Illinois farmers during late July, when the crop looked overwhelmingly large, Hieronymus says. New-crop meal was worth $62, bulk, per carton and oil was 8.5 cents per

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pound. Maximum impact of the dry weather was reached on October 8, when soybeans were $2.73, meal $71 and oil 10.75 cents. The reassuring crop estimate on October 9 caused prices to decrease to $2.65 for beans and $69 for meal. Oil has since increased to 11.25 cents.

That the price of oil should go up more and hold better than meal seems appropriate because of the relative demand structure of the two, Hieronymus says. We are more likely to run out of beans to make oil than to make meal.

Meal demand should be a little stronger during 1965, Hieronymus says. Livestock numbers are down, but hog prices are up. There is a chance, however, that meal demand will not be strong enough to absorb the meal from a 470 million crush except at prices substantially below current levels.

Domestic use of soybean oil should again set a record of nearly four billion pounds, Hieronymus says. Total world oil supplies have changed little from last year except for the large decrease in olive oil production, which is offset by an increase in carryover. Cottonseed oil supplies are up slightly, and lard and butter production will be down.

Population is up each year, however, and the world needs more oil, Hieronymus says. The extra demand will be filled by soybean oil. The change from abundance a year ago to a delicate balance now has caused a 12 percent increase in the general price level of fats and oils.

During the year ending October 1, soybean oil exports totaled 1.1 billion pounds. About half was sold for dollars and half was shipped under Public Law 480 as surplus disposal. Dollar exports will be

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down in some markets, Hieronymus says, but we will get Spain back as a dollar customer after a year's absence. Spain's total purchase is a major uncertainty, but a reasonable guess is 150 million pounds.

India also has signed her first Public Law 480 agreement for oil, Hieronymus says. While the amount she may take is uncertain, it probably will be about 165 million pounds.

The business of Poland and Yugoslavia, programmed for 165 million pounds, may be lost, Hieronymus says, unless the extension of P. L. 480 is changed when Congress returns or we grant dollar credits. This extension, passed before Congress adjourned, prohibits the sale for foreign currencies to communist countries. Export potential without Yugoslavia and Poland is about 1,265 million pounds compared with 1,430 million pounds with them, Hieronymus says.

At present it seems that domestic and export requirements will total about 5.4 billion pounds. Stocks are comfortably large and can be drawn down 250 million, leaving a requirement of 5.15 billion pounds. This supply will require oil from 470 million bushels of soybeans, an increase of about 30 million bushels from 1963-64.

This amount should be enough, Hieronymus says, unless the U. S. supply of soybeans is not adequate to crush 470 million bushels. A crush of less than this amount will probably further increase the price of meal, Hieronymus says.

This crush would make 11.2 million tons of meal. Meal exports in 1963-64 totaled about 1.4 million. It will be difficult to get them above 1.5 million during 1965. Use of this amount for export would leave 9.7 million tons for domestic use, which is up more than 7 percent from 1963-64.

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10/30/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Economist Outlines Trends To Influence Agriculture In Next Decade

URBANA--Social and economic trends in agriculture today will strongly influence the lives and actions of rural people during the next decade, according the Harold G. Halcrow, head of the University of Illinois Department of Agricultural Economics.

"The strong growth in farm production and farm markets, major shifts in production and marketing practices, and the decrease in farm population coupled with growing urban influence in rural areas are the three major trends in agriculture today," Halcrow said in addressing the annual fall conference of the Illinois Cooperative Extension Service.

These trends forecast for farmers increasing family income per farm despite a continuing cost-price squeeze, stable price relationships between farm products and farm inputs and decreasing manpower requirements for farming, resulting in job disadvantages for rural youth and a need for agricultural adjustment in Illinois.

Farm production has increased about one-third since the end of World War II, while consumer income spent for food has decreased. Today food takes less than one-fifth of the family income, Halcrow says. This increase, however, has weakened the trade terms of U. S. farmers. Farm product prices are now low in relation to prices paid for goods used in farm production, and they probably will not increase significantly unless there is a major war or other national calamity.

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Exports have been heavily subsidized to expand sales abroad, Halcrow says. To a smaller degree some consumers have been subsidized in an effort to increase food consumption. Although these programs have helped to clear markets, they have not improved trade terms of farmers and will not greatly improve them during the next decade.

The domestic demand for wheat is highly stable, but production is double the domestic requirements and wheat growers are dependent on subsidized export sales, Halcrow says. Despite talk of a great surplus of wheat and feed grains, many former exporting areas--Russia, China, Southeast Asia and Latin America--no longer have large amounts to export, Halcrow points out.

"Hunger is the most crucial problem in the underdeveloped countries, which have about three-fourths of the world's population," Halcrow says. "The prospect that the world population will double in 40 years is cause for alarm, since the increase in farm output in the past 15 years has not kept pace with the increase in population. If current trends continue, there will be a widening of this 'food gap' in the underdeveloped countries."

U. S. agriculture does have considerable growth potential, Halcrow believes. Much of it comes from such products as machinery, electrical power, motor fuel, chemical fertilizer, insecticides, new feed ingredients, and new disease control materials. These items are reflected as cash production or operating costs. During the past 20 years these expenditures have replaced labor to such degree that total costs of agriculture have stayed constant.

In Illinois during the next decade, the number of farms is expected to decrease from the present 135 to 140 thousand to about 100 thousand. This drop represents continuation of a decline covering the

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past 40 years. The peak in number of farms in the state was reached in 1920 with 237,000. In 1940 the number had dropped to 213,000. In 1959 it had declined further to 154,000.

The single-family farm or two-family enterprise will continue, Halcrow says. In livestock feeding there is some potential for large corporate units. Grain farms and general grain-livestock farms will grow. Specialized livestock farms will increase, though confinement methods of production will decrease the importance of land area.

The demand for livestock products will cause beef cattle, hogs and poultry to expand faster than the total agricultural production, Halcrow says. Farmers will need to shift toward feed and forage crops to supply this market. There will be more direct sales to packers and processors as receipts at terminal markets decline. There are also likely to be no important terminal markets for poultry, eggs, milk or other perishable farm products. Specification packing and sales will be used more in handling fresh fruits and vegetables to increase the efficiency of direct buying organizations.

Rural areas are losing population rapidly and are becoming increasingly dominated by people with urban values and interests, Halcrow says. Most studies show that only a small percentage of rural children will earn their living on the farm. Studies also show that rural youth are lagging behind urban youth in the years and quality of education they receive and in their ability to compete in the labor market.

As a result, the need for more and better education requires special emphasis, Halcrow says. Investments in education would pay high returns in improving and expanding opportunities for rural youth who must leave the farm to find their lifework.

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10/30/64

FOR IMMEDIATE RELEASE

U. Of I.-Backed Indian University To Graduate 60 Ag Engineers In 1966

URBANA--The U. P. Agricultural University in India expects to double the annual output of trained agricultural engineers in that country when it graduates its first class of 60 students in 1966.

That's the report of Ralph C. Hay, University of Illinois professor of agricultural engineering, who returned from India in August. For the past two years Hay was adviser to the Dean of the College of Agricultural Engineering and Technology of the U. P. Agricultural University, which is located in the northern Indian state of Uttar Pradesh.

U. of I. advisers helped to establish the U. P. Agricultural University's Agricultural Engineering Department in 1962. The new department has admitted 75 students annually since that time.

Hay says agricultural engineers are badly needed in India. At present Indian universities graduate only about 60 agricultural engineers a year. U. P. Agricultural University graduates will boost that number to 120 annually in 1966.

The U. of I. also has cooperated with two other institutions teaching professional agricultural engineering in India. The Allahabad Agricultural Institute began receiving U. of I. help more than 12 years ago.

The Indian Institute of Technology Agricultural Engineering Department in Kharagpur also has received U. of I. assistance. Hay acted as first head of that department from 1954 until 1956, when the first class of agricultural engineers was graduated from the Institute.

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10/30/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS   COLLEGE OF AGRICULTURE   URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Farm Family Faces Many Hazards Because Of Advancing Technology

The technology that provides greater production and a more satisfying life for the farmer and his family also exposes them to more hazards than ever before, reports David E. Lindstrom, University of Illinois rural sociologist.

Speaking at the farm session of the National Safety Congress in Chicago recently, Lindstrom said that, while we like to think of farming today as both a business and an enjoyable way of life, it is important to remember that it is a dangerous occupation. The diversity of farm work exposes farmers to many situations not faced by urban people, as well as to the general hazards that most people encounter.

The result is that in only one category of accidents--accidents on the farm--are there more fatalities while working than while not working. Continuous research and education are needed to help farm families live safely, Lindstrom says.

Farm people are more responsible for self-protection than people in most other occupations.

Studies made in several midwestern states show that most farm accidents occur in the home. Accidents in the farm yard are second most frequent. Most of these accidents result from falls. Working with farm machines accounts for over two-fifths of field accidents, which increase as farmers grow older. Farm women have more accidents in the farm yard than in the home, Lindstrom says.

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[illegible]

[illegible]

[illegible] as to the general hazards that most [illegible]

[illegible] Lindstrom says.

[illegible] other occupations.

[illegible]

Most fatal accidents are caused by automobiles, Lindstrom says, with buildings, tractors or other farm machines next in number of accidents caused.

It has been said, Lindstrom points out, that accidents "just happen" or that some people are "accident prone"--that is, they have more accidents than others. Studies indicate, however, that accidents do not happen without cause. Neglect, fatigue, forgetfulness, disorder and carelessness cause many accidents. Certain symptoms also point to reasons for so-called accident proneness, Lindstrom adds.

Tension is one condition causing such accidents on the farm, Lindstrom says. It may come from pressure to get things done, from excitement, impatience or fear of losing a crop. The family that becomes careless, hasty or confused in making decisions often has more accidents than the family that calmly faces trying situations.

Accidents, when happening often to an individual or a family, indicate a proneness to let accidents happen rather than accident proneness, Lindstrom says.

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11/3/64

FOR IMMEDIATE RELEASE

ARD Program Helps Rural And Urban People Solve Problems, Fulfill Needs Of Community

Changes in technology, mechanization and automation, and population increases are significant forces that have created both problems and benefits in our economy.

The Area Resource Development Program provides a way for people of a community, county or area to work together in identifying and solving these problems and fulfilling their desires and needs, states E. L. Sauer, University of Illinois extension specialist in rural development.

Speaking recently in Springfield at the annual convention of Township Officials of Illinois, Sauer pointed out that, while the Cooperative Extension Service has long been engaged in resource development, the present program is an outgrowth of the Disadvantaged Agricultural Act of 1955. It involves both rural and urban people and areas.

Both rural and urban people have community concerns beyond their homes, farms and other businesses, Sauer believes. Resource development is essentially a unified approach to economic and civic growth and improvement through individual and group planning for action.

Although RAD is a national program, in Illinois local people decide whether a county development committee will be organized. At present 46 Illinois counties have organized committees and have projects under way to attract new industry, expand existing industry and improve the agricultural economy.

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For example, ten counties in southern Illinois have organized an area committee with representatives from each county. Projects include recreational and tourism development and promotion, feeder calf, feeder pig and fruit production and marketing, and development of programs to train low-income people to help them get jobs or better jobs. Forest resource utilization is another successful project, Sauer reports.

Many counties are giving high priority to farm recreation development, education, career guidance for youth and job training and retraining programs. Significant emphasis has been placed on career guidance and development for youth.

The Cooperative Extension Service and about 60 agencies, organizations and groups are helping Illinois people make optimum use of physical and human resources to improve the economic opportunities for people in the areas, Sauer says.

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11/3/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE AFTER 2:00 P.M.
NOVEMBER 18, 1964

SPECIAL COVERAGE
AMERICAN SOCIETY OF AGRONOMY

Increase Herbicide Use, Reduce Tillage?

KANSAS CITY, MO.--A three-year University of Illinois study comparing cultivation with broadcast application of atrazine for weed control indicates little or no benefit from cultivation--on most soils in most seasons--other than for weed control, U. of I. agronomists Ellery Knake and Tom Hinesly reported here today at the annual meeting of the American Society of Agronomy.

The study, conducted on a wide variety of soil types at eight locations, also compared one and three diskings. In addition, the agronomists checked the feasibility of completing all tillage and spray operations several weeks before planting and studied the effects of planting corn in sod.

Results from both the row cultivation vs. pre-emergence application of atrazine and from the one vs. three diskings indicated that there was little or no need for row cultivation if weeds were controlled in some other way--except on some soils where the seedbed had been overworked at planting time. On Blount silt loam--a soil with low organic-matter content in northeastern Illinois--midseason cultivation showed a slight advantage where seedbeds had been prepared with three diskings, Knake and Hinesly pointed out.

In an attempt to find an improved method of using atrazine, the agronomists tried an early preparation—late planting method. They applied an insecticide, prepared the seedbed and applied atrazine while

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the soil was still too cool to plant corn. As soon as the soil had warmed sufficiently, they planted the corn. Such a system, they theorized, might provide more favorable rainfall for atrazine than the present system. Applying the atrazine even a few weeks before planting should help reduce the carryover, and the chemical should still last long enough to control the weeds.

The agronomists reported that they had more of a problem with perennial weeds with the early preparation and late planting than when they prepared the seedbed later and planted at the same time. Early preparation and later planting are probably best adapted to use where the major problem is annual weeds rather than perennials, they reported.

In the sod-planting study, Knake and Hinesly sprayed annual bromegrass sod in the spring with Lorox before planting corn in 10-inch tilled strips prepared in the dead sod. The 1962 results were good, so last year they tried spraying the sod and planting at the same time. The dry weather that followed during the 1963 season emphasized the need for killing the sod a few weeks before planting, the agronomists pointed out.

Although a sod left growing too long in the spring can deplete soil moisture, a dead sod may help to conserve moisture. Both the early spring growth of sod and the dead sod later in the season may help to control weeds. Lorox looks promising. It can kill existing vegetation and may also have some residual activity for pre-emergence control of weeds that start growing later. A combination of paraquat or amitrole-T to kill existing vegetation and atrazine for pre-emergence activity has possibilities, reported Knake.

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Illinois has over five million acres of soybeans and about nine million acres of corn, so corn frequently follows soybeans. Since beans often leave the soil mellow, Knake and Hinesly also studied tillage-minimizing techniques. At least one tillage operation not only helps to clear the path for the planter, but also allows a pre-emergence herbicide, such as atrazine, to enter the soil and control weeds more effectively than under no-tillage methods, the agronomists reported.

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11/5/64

FOR RELEASE AFTER 2:00 P.M.
NOVEMBER 16, 1964

SPECIAL COVERAGE
AMERICAN SOCIETY OF AGRONOMY

Permanent Seedings Can Reduce Erosion-Prevention Cost On Highways

KANSAS CITY, MO.--A three-year study in cooperation with the University of Illinois offers the Illinois Division of Highways an opportunity to reduce erosion-prevention cost on roadsides. The results show that permanent seedings provide more cover--and sooner--than temporary seedings overplanted with permanent mixtures, reported U. of I. agronomist O. N. Andrews, Jr., at the annual meeting of the American Society of Agronomy here today.

A once-over seeding operation using a predominantly alfalfa-fescue mixture provided more cover than any other combination of species. Since alfalfa is a perennial, it does not decline as annual Korean lespedeza does. The latter is an annual and must reseed itself, Andrews pointed out. Quick, permanent establishment is a must in erosion control, since most seeding contracts carry 120-day release dates, he added.

Andrews made 12 temporary and permanent seedings at two-week intervals from May 1961 through November 1961. Oats and rye were the temporary species. A complex permanent mixture containing predominantly alfalfa and fescue and a permanent mixture presently used by the Illinois Division of Highways containing Korean lespedeza and fescue were the permanent mixtures.

Permanent seedings provided as much ground cover as temporary seedings in 1961 except in the late fall. Oats provided more ground cover than rye in the early summer seedings. By November 1962, the temporary seedings--overseeded in September 1961 with the highway permanent mixture--provided less cover than the permanent seedings, especially the midsummer seedings. In 1962, the temporary oat-seeded plots had more cover than those seeded to rye. All treatments had become established by 1963.

JJF:ml
11/5/64

FOR RELEASE 10:15 A.M.
NOVEMBER 18, 1964

SPECIAL COVERAGE
AMERICAN SOCIETY OF AGRONOMY

Shade Tolerance Of Corn Vital For High Yields

KANSAS CITY, MO.--One reason certain corn hybrids consistently outyield others at high populations is the difference in their ability to convert nitrates to amino acids and protein. These components are essential for plant growth and yield.

University of Illinois agronomist L. E. Schrader reported to the 56th annual meeting of the American Society of Agronomy today that his work with R. H. Hageman, U. of I. professor of plant physiology, showed that the activity of the enzyme nitrate reductase was related to the production of amino acids and proteins.

He added that nitrate reductase was much more active in the experimental hybrid, Hy2 x Oh7, than in another hybrid, WF9 x C103.

Leaf position has a marked influence on nitrate reductase activity. There is less activity in the bottom leaves than in the top and middle leaves. Schrader pointed out that the middle leaves of WF9 x C103 had considerably less nitrate reductase activity than the top leaves, whereas in Hy2 x Oh7 the activity of the enzyme was nearly as high in the middle leaves as in the top leaves.

This suggests that the shading imposed by high plant populations has less effect on the nitrate-producing capacity of Hy2 x Oh7 than on that of WF9 x C103. Hence at the critical time of ear development, Hy2 x Oh7 has the greater total capacity for reducing nitrates and producing protein.

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11/5/64

FOR RELEASE AFTER 4:30 P.M.
NOVEMBER 16, 1964

SPECIAL COVERAGE
AMERICAN SOCIETY OF AGRONOMY

Search For Hybrid Soybean Gives Some Hope

KANSAS CITY, MO.--The plant breeder's search for a commercial hybrid soybean to boost grain yields involves the use of male sterility. When male-sterile, a plant cannot produce and shed good pollen, but it can set seed if pollinated by normal pollen.

So far, chemicals for producing male sterility have been disappointing, but there is hope for discovering genetic male-sterile plants. At the 56th annual meeting of the American Society of Agronomy here today, University of Illinois agronomist Reid G. Palmer explained recent efforts involving reciprocal crosses between two wild relatives of soybeans. They are *Glycine tabacina* from Australia and *Glycine tomentosa* from Southeast Asia.

Flowers of the crosses were larger than those of either parent. With *G. tomentosa* as a female parent, 3 percent of the pollen was large and well stained, 75 percent was large but poorly stained and 22 percent was small. The anthers of this hybrid did not discharge their pollen. Only 0.12 percent of the flowers set pods. These pods set only during extremely hot weather.

On the other hand, with *G. tabacina* as the female parent, the anthers discharged well and had abundant pollen. Fifty-eight percent was large and well stained, 12 percent was large but poorly stained and 30 percent was small. Three percent of these flowers set pods.

These results suggest, but do not yet demonstrate, a genetic system for male sterility.

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11/5/64

FOR RELEASE AFTER 11:30 A.M.
NOVEMBER 19, 1964

SPECIAL COVERAGE
AMERICAN SOCIETY OF AGRONOMY

Soybeans Show Varying Response To High Fertility Levels

KANSAS CITY, MO.--Some soybeans respond better than others to high levels of soil fertility, said University of Illinois soil fertility researcher E. J. Dunphy at the 56th annual meeting of the American Society of Agronomy here today.

Dunphy said that some soybean plant introduction lines and name varieties were grown on test plots that were unfertilized,and others on plots treated with high levels of both phosphorus and potassium.

The different soybeans tended to respond in a similar way, but some lines and varieties were outstanding in their ability to produce greater yields at high levels of soil fertility. Others benefited only slightly from increased fertility. Responses of the different varieties and lines are usually consistent from year to year.

Generally speaking, differences in response were more unusual among established name varieties than among the plant introduction lines. A number of the plant introduction lines that showed large responses to fertility and some that showed no response are being studied further by geneticists of the U. S. Soybean Laboratory.

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11/5/64

FOR RELEASE AFTER 10:00 A.M.
NOVEMBER 18, 1964

SPECIAL COVERAGE
AMERICAN SOCIETY OF AGRONOMY

Role Of Upper Corn Leaves Sheds Light On Yield Barrier

KANSAS CITY, MO.--Defoliation treatments on corn at the University of Illinois Agronomy South Farm reaffirm the importance of the plant's top leaves in making the crop. The study also emphasizes that yield increases from changing planting patterns will not be spectacular, reported U. of I agronomist J. W. Pendleton at the annual meeting of the American Society of Agronomy here today.

Pendleton thinks that the combination of top management and narrower corn rows will help to push yields upward. In U. of I. research, yields in closer row spacing have averaged about five to ten bushels more than those in conventional plantings, Pendleton reported.

In the U. of I. experiment, agronomists applied 10 defoliation treatments at four weekly intervals--beginning with tassel emergence--to determine the relative importance of leaf position in corn yield, kernel weight and number and protein and oil content of the grain.

Removal of the upper leaves affected yield more drastically than removal of the lower leaves, and reductions were greater from early than from later defoliations. Analyses showed that yield reductions were due to a decrease in kernel number rather than kernel weight. Grain oil content was relatively constant for all treatments. Defoliation significantly affected grain protein. Removal of any leaf area increased the grain protein, but grain protein content was higher when the upper leaves were removed or defoliation occurred early.

More than 2,200 agronomists attended the annual ASA meeting. The program, which included 575 research papers, was the largest in the Society's history.

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11/5/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Changes In Income Tax Laws Will Benefit Farmers

The Revenue Act of 1964 signed into law the first major overhaul of the federal income tax in a decade.

Some changes will affect every taxpayer, reports Fay M. Sims, University of Illinois farm management specialist, but several new provisions will particularly benefit farmers.

First, the 1964 Revenue Act provides for a two-step reduction of tax rates. This year the range is reduced from 20 percent—91 percent to 16 percent—77 percent. In 1965 and succeeding years the range is lowered to 14 percent—70 percent.

For example, a married couple with two dependents and a net income of $6,000 from farming who paid $600 tax in 1963 will pay about $500 this year and $450, or 25 percent less, in 1965.

The same couple with a net income of $10,000 will find their 1965 taxes 19 percent less than today. The largest reduction in tax *rates* occurs in the lower income brackets; the largest reduction in tax *dollars paid* will accrue to the high-income taxpayer.

Second, the new law contains an income-"averaging" provision that will benefit the taxpayer who has a fluctuating income. Returns from farming vary from year to year because of weather, disease, insects and price changes, Sims points out. Farmers depend on earnings in good years to carry them over the less profitable years; however, the old revenue law penalized individuals with fluctuating incomes by taxing in high-profit years at high-profit rates.

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According to the averaging provision, if income in any year exceeds by more than one-third the average income of the previous four years, that income may be averaged if it is at least $3,000.

A farmer who had a taxable income of $20,000 in 1965, for example, would pay a $4,380 tax at 1965 rates. If his taxable income had averaged $6,000 for 1961-64, he could use the averaging provision to reduce his tax to $4,020--a $360 saving.

A third provision of the 1964 law permits the new minimum standard deduction in addition to the regular $600 personal exemption. This deduction is $400 for a married couple filing jointly, $300 for a single taxpayer and $100 for each dependent. The maximum amount deductible is $1,000, Sims explains.

A typical married couple with three dependents and an adjusted gross income of $2,000 can now deduct $700 instead of the 10 percent standard deduction of $200. If this couple had an adjusted gross income of $8,000, they could take the usual 10 percent standard deduction of $800.

Of importance to farmers is a provision for a bigger depreciation basis on new investments in machinery and other items that qualify under the investment credit rule.

Sims points out that the investment credit enacted in 1962 allowed a taxpayer to deduct up to 7 percent of the cost of certain property used in farm business and bought after January 1, 1962. The law also required that the basis of the property for depreciation be reduced by the amount of the investment credit.

The new law provides that depreciation basis need no longer be reduced by the amount of the investment credit claimed on machinery and other property placed in service January 1, 1964, or after.

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In addition, investment credit claimed in 1962 and 1963 must now be added back to the basis of property still on hand.

Included in property that qualifies for investment credit are machinery and equipment (including freight charges) "ready and available for their assigned functions"; major overhauls of machines if life is extended at least four years; silos and grain bins; fencing; elevators, milking apparatus or hay-handling equipment; trucks, cars and water pumps used in farm business.

Livestock and buildings do not qualify, Sims reports. Although there is some question about drain tile, it appears to qualify as "an integral part of crop production."

The new Farmer's Tax Guide, available at the farm adviser's office about January 1, 1965, will further explain and give examples of tax changes.

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11/10/64

FOR IMMEDIATE RELEASE

1964 Revenue Act Provides Tax Relief For People Over 65

There is tax relief in the 1964 Revenue Act for people 65 years of age or older, according to Fay M. Sims, University of Illinois farm management specialist.

Here are ways in which these taxpayers may benefit:

1. On the sale of a personal residence, part of the gain may be excluded if the sale price exceeds $20,000. All of the gain may be excluded if the sale price is less than $20,000.

For example, if a taxpayer sells his home for $24,000 at a $6,000 profit, $5,000 of this profit (achieved by using $\frac{20}{24}$ x $6,000 as a formula) would be subtracted from the adjusted gross income and only $1,000 would be taxed at capital gain rates. If the home were sold for $19,000 at a $6,000 profit, the entire $6,000 would be tax free.

The taxpayer may benefit from this law only once after he is 65 years of age, and the house that is sold must have been his principal residence for at least five of the past eight years, Sims explains.

2. The cost of medicines and drugs is now fully deductible rather than limited to one percent of the taxpayer's adjusted gross income, as in past years. This change also applies to medicine and drug expenses paid on behalf of dependent over-65 parents of the taxpayer or his spouse.

3. An additional $100 on the minimum standard deduction is allowed for taxpayers who are over 65 or blind.

4. The special tax credit against dividends and other retirement incomes is now more liberal for retired couples filing jointly. If the husband and wife both reach 65 years before December 31, the maximum income on which the credit may be based is $2,286 compared with $1,524. The credit will be reduced from 20 percent to 17 percent of eligible income for 1964 and reduced further to 15 percent for 1965.

Although taxes are still inevitable, Sims says, the new laws will leave more money for those over 65 years who are living on fixed or limited incomes.

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11/10/64

FOR IMMEDIATE RELEASE

Keep Records, Consult Specialist To Save Income Tax Dollars

As tax planning time for 1964 approaches, taxpayers should realize that, while Uncle Sam does want your tax dollars, he wants only what is due him--no more.

Managing a farm business to avoid unnecessary tax payment requires complete and accurate records, states Fay M. Sims, University of Illinois farm management specialist. Lack of good farm cost records and depreciation schedules causes many farmers to pay more income tax than is required.

County farm advisers have a good record book prepared by the University of Illinois Cooperative Extension Service, Sims reports. This book is available to any interested person. In addition, the Farm Bureau Farm Management Service offers a record-keeping service, visits by fieldmen and farm record analysis. Farm advisers can supply information about this service.

A second step toward saving money, Sims believes, is to get good professional tax advice and be willing to pay for it. Nothing is more costly than poor advice, he says.

Since it is unlikely that many individuals keep up with all tax rules, a farmer should find a farm income tax specialist. There are many competent tax practitioners in Illinois, Sims points out. The University of Illinois Cooperative Extension Service and Internal Revenue Service jointly conduct annual farm income tax schools to teach tax practitioners new laws and interpretations of existing tax laws.

Finally, plan to see your tax specialist more often than at tax-filing time, Sims adds. The more the tax consultant knows about a client's farm business, the more he can help with effective tax management.

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11/10/64

FOR IMMEDIATE RELEASE

"Mature" Corn Silage Receiving Research Attention At U. Of I.

URBANA--A fine chop and tight packing in the silo are important steps to successful storage of "mature" corn silage in conventional tower silos, according to limited University of Illinois research with the new forage.

U. of I. dairy scientists J. H. Byers and E. E. Ormiston say a comprehensive research study started this fall and ending next winter should provide more information about this new silage-making practice which some Illinois farmers are following to help extend their winter roughage supply.

"Fine chopping and careful tramping should cut silo losses," Byers explains. "However, farmers who make corn silage in late November will have to expect some field losses from lost leaves, downed plants and shattered corn, especially after the dry fall we've experienced."

Field losses with mature corn silage amounted to about three-quarters of a ton per acre in a U. of I. study last year. In that study, researchers compared corn harvested on November 11 with conventional silage that was ensiled on September 27. Dry matter content was 31.5 percent for the control silage and 54.9 percent for the experimental silage.

Digestion trials showed the regular silage to be superior to the mature silage in dry matter and protein digestibility. Dry matter digestibility for lactating cows on the control silage was 62.7 percent compared with 56.7 percent for cows on the mature silage.

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Protein digestibility was significantly lower for mature silage than for the control silage. However, cows maintained milk production as well on mature silage as on the control.

When completed, current U. of I. studies with mature corn silage will compare storage quality and feeding value for silage cut in the pre-dent, dent, late dent and post-maturity stages. Results of the study will be available early next spring.

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11/10/64

FOR RELEASE THURSDAY P.M.,
NOVEMBER 12, 1964

U. Of I.'s Harry Russell Receives National Swine Award

KANSAS CITY, MO.--University of Illinois extension livestock specialist Harry Russell received the National Hog Farmer Distinguished Service Award here today during the National Pork Industry Conference. The award is presented annually for outstanding contributions to the swine industry.

Russell received his B.S. degree in agriculture at the U. of I. in 1930 and his M.S. degree in 1933. He has been an extension livestock specialist at the University since 1936.

For nine years Russell had the responsibility for all livestock extension work in the southern half of the state. In 1945 he was given the responsibility for livestock extension work over the entire state.

A nationally known judge of hogs, Russell has judged major shows from California to Georgia, including several years at the National Barrow Show and practically every state fair in the Midwest. He has served on the type standardization committee of the Chester White, Duroc, Hampshire, Berkshire, Poland China, Spotted Poland China and Yorkshire breeds at national breed type conferences and shows.

Russell has long played an active role in swine producers' organizations. He helped organize the Illinois Swine Growers' Association (now the Illinois Pork Producers' Association) in 1946 and has served on an advisory committee for the association since that time. He has served on the Illinois Hog Cholera Eradication Committee since its beginning.

Russell also helped develop the first boar testing station in the United States (at Forrest, Illinois) and the on-the-farm "probe and weigh" program for selecting replacement stock.

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11/10/64

FOR RELEASE P.M. THURSDAY,
NOVEMBER 12, 1964

Management, Capital Needed To Increase Farm Production In Developing Nations

URBANA--Agriculture in developing nations must have more and better management and capital if it is to change from a state of producing just enough food to maintain already inferior diets to a commercial state.

This is the opinion of C. B. Baker, University of Illinois professor of agricultural economics, expressed today at the Conference on the Economic Development of Agriculture at the Center for Agricultural and Economic Development, Iowa State University, Ames.

"It is futile to consider either management or capital without also considering the other," Baker says. "If management falls short of the mark, any capital added or changed is misused or falls below the the desired level of productivity. Improvement of management personnel alone causes migration from agriculture that depletes it of the high-quality management skills it seriously needs."

There is little doubt, Baker believes, that agricultural capital in developing nations is limited and restrains farm development. Increased capital supply would change production organization, increase farm contributions to total national production and increase incomes of farm workers.

Research shows that about 70 percent of India's farm producers are capital-starved and unable to qualify for more credit from present sources, Baker says. Current studies also suggest that this is a general problem among all underdeveloped countries.

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Baker suggests that the problem originates on the farm, citing evidence that the financial community does seize the opportunity to lend at a profit. At the farm level the problem is to develop a credit reserve that can be used as a basis for loans.

For any farm producer with limited capital, developing and using this credit reserve is very important, Baker reports. Credit reserve can be developed by increasing assets, by maintaining liquidity in asset structure, and by honoring contractual obligations.

Increasing the rate of saving to build a surplus for investment is imperative to economic growth, Baker points out. In underdeveloped countries where farm production is in a subsistence state, this is difficult to do.

Thus it is important that research and education in farm financial management accompany research and education in technical farm production if agriculture in the underdeveloped countries is ever to approach the state it now occupies in the developed nations of the world, Baker concludes.

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11/10/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Leaflet Gives Latest Dairy Feeding Recommendations

URBANA--The dairyman's most up-to-date feeding guide is the new University of Illinois leaflet entitled "Current Dairy Feeding Recommendations."

Main theme of the leaflet is that many dairy cows now have the genetic ability for high milk production. It is up to the dairyman to follow feeding and management practices that will bring out the full potential of each cow.

The 22-page leaflet gives detailed analyses of such common dairy feeding problems as adjusting the grain mixture to the roughage, determining how much grain to feed, hand-feeding protein supplements and "challenge" feeding.

A major feature of "Current Dairy Feeding Recommendations" is a list of 36 common dairy feeding questions asked by Illinois dairymen. Here are a few of the questions and the answers U. of I. dairy scientists give to them.

SHOULD I FEED VITAMIN A?

Vitamin A deficiency rarely occurs in mature dairy cattle that are on pasture or are fed green-chopped forage. However, it may occur after prolonged feeding of poor-quality forage or roughage that has been stored for several months. Cattle subsisting largely on concentrates and corn or sorghum silage with only small amounts of good hay also may be susceptible to vitamin A deficiency.

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If you have some doubt about the adequacy of the carotene or vitamin A intake, you may want to feed a supplementary source of vitamin A. Add about 20,000 to 30,000 international units daily per cow.

HOW ARE THE NEW SORGHUM-SUDANGRASS HYBRIDS?

Sorghum-Sudangrass hybrids will produce a large amount of forage during the summer. They are well suited to green-chopping and on a one- or two-cutting schedule they will probably outyield Sudangrass. However, for more frequent cuttings or for pasturing, a good variety of Sudangrass may be preferable. As a general rule, these hybrids probably will not equal corn for silage production or alfalfa for dry hay.

TO WHAT EXTENT CAN I SUBSTITUTE GRAIN FOR HAY?

If you are short of roughage and hay prices are high, it may pay you to feed slightly more grain instead of buying expensive hay.

Here's a good rule of thumb to follow: When the cost of one pound of grain mixture consisting of 700 pounds of ear corn, 400 pounds of 44 percent soybean meal and 20 pounds of dicalcium phosphate or steamed bonemeal is less than the cost of about two pounds of average alfalfa-grass hay, it would probably be economical to substitute grain for part of the roughage. However, there is a limit to the amount of roughage that can be removed from the ration. Milking cows should get not less than one pound of dry hay or its equivalent per 100 pounds of body weight per day.

IS THERE ANY ADVANTAGE IN FEEDING STILBESTROL TO DAIRY ANIMALS?

Research indicates that neither feeding stilbestrol nor using stilbestrol pellet implants has any advantage in promoting more efficient milk production in mature cows. Nor does stilbestrol stimulate

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more rapid growth in dairy heifers. Therefore, stilbestrol is not recommended in dairy herds except as prescribed by a veterinarian.

WHAT IS THE FEED VALUE OF SPROUTED GRAINS?

Sprouted grains have no greater feed value than unsprouted grains for milking cows. In fact, sprouted grain takes up moisture and loses carbohydrates. The extra vitamins that may occur in sprouted grains are of little value to the cow.

WHAT ABOUT PELLETED GRAIN RATIONS?

Feeding pelleted grain rations may be worth while when cows are milked in a parlor where eating time is limited. Some experiments have shown that cows will eat pellets up to 25 percent faster than meal. Pellets may also cut feed waste and have some handling advantages. Pelleting costs will determine whether the practice is worth while.

These are just a few questions answered in "Current Dairy Feeding Recommendations." Dairymen who would like a copy of the leaflet should contact their farm adviser or write to the U. of I. College of Agriculture in Urbana.

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FOR IMMEDIATE RELEASE

Know Your Rights, Legal Duties During Hunting Season

The number of hunting accidents is increasing each year.

As the hunting season opens this fall, landowners, tenants and hunters need to review their rights, legal duties and liabilities, emphasizes Charles Whalen, University of Illinois agricultural law specialist.

The most important legal right of farm owners or tenants is that hunters are responsible for any property damage they cause whether it is to fences, animals or people, Whalen reports.

Hunters, whether hunting with permission or not, are legally bound not to injure or destroy property belonging to the landholder, his neighbors or other hunters. The hunter can be required to pay for any loss he causes.

A farmer's responsibility to the hunter depends on whether he is a trespasser, a licensee or an invitee, Whalen explains. A trespasser has no right to enter the lands of others. A licensee is one who has permission to enter and hunt. An invitee is one who comes to hunt at the invitation of the landholder and often is charged a fee.

The farmer has no duty to protect a trespassing hunter, Whalen points out, but he must not injure a trespasser willfully or through recklessness. For example, ordering a vicious dog to attack a trespasser might make the farmer liable for injury to the hunter.

Many courts say that a trespasser takes the land as he finds it. If an accident befalls him, he cannot hold the farmer liable, Whalen says. However, this rule has changed slightly in some states.

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While the trespasser still takes the land as he finds it, the farmer has a duty to warn him of dangers on the property once his presence is discovered.

A few eastern courts that have adopted this rule reason that, once you know a trespasser is on your land and do not evict him, you in effect agree to his presence and thus make him a licensee. Illinois courts could be influenced by this type of reasoning.

The licensee, like the trespasser, takes the land as he finds it, but the landholder must not willfully or recklessly injure him and must warn him of hidden dangers. If a licensee is injured by an obvious hazard, the landholder is not liable, Whalen explains.

When you invite people to hunt on your farm and charge a fee, you must take great care to make the property reasonably safe, Whalen says. You can help prevent possible accidents by repairing fences, replacing rotten boards over old wells or on docks, storing equipment and clearing heavy underbrush so that hunters can see each other. Unruly bulls and vicious dogs should be confined.

As an additional safety measure, hunting parties should be kept small, and no two parties should be permitted in the same area.

In addition, if hunters' cars are left at the farmstead and a theft occurs, the farmer may be liable, particularly if he has charged a fee for hunting.

To limit liability, a farmer may not permit hunting on his property. He does not have to post "No Hunting" signs to keep hunters out, but it is a good idea to do so. If he allows licensees or invitees to hunt, Whalen advises having insurance protection.

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FOR IMMEDIATE RELEASE

Choose Your Firewood Wisely

URBANA--The fireplace is a highly inefficient means of heating homes, but the blazing log on the hearth represents a tie with the past that modern heating methods have not broken. As long as the fireplace provides a cheerful fire with a minimum of effort, disorder and smoke, most homeowners are willing to disregard its inefficiencies.

C. S. Walters, professor of wood technology and utilization at the University of Illinois, says the satisfactory performance of a fireplace depends to a great extent on the type of wood you use. Whether you buy wood from commercial sources or cut your own, consider the kind, size, quality and moisture content of the wood, Walters advises.

The heating value of dry hardwood can be judged by its weight. Generally the heavier hardwoods are considered better for fuel than the lighter ones. For fireplace use, Walters rates apple, beech, black locust, hedge (osage orange), hickory, oak, pear and sugar maple in the "best" category. Ash, black cherry, elm, and silver (soft) maple are good sources. Basswood, catalpa and cottonwood are only fair, he says.

Wood is bought and sold by volume (cord) and by weight. A "standard" cord is a stack 4 feet high, 4 feet wide and 8 feet long. A "face" cord also is 4 feet high and 8 feet long, but the wood in a face cord may be any specified length. Generally the pieces are 16 inches or 24 inches long. The buyer must specify the width of the face cord, Walters adds.

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In some cities, firewood is sold by weight. The weight--and fuel value--of wood depends on the moisture content, and few homeowners are equipped to determine the moisture content of wood. However, Walters says wood that has seasoned through the summer and is properly stored will be dry enough to burn the following fall and winter.

Proper storing of firewood involves more than space. Consider seasoning, rot, fire and termites, Walters advises. Wood seasons faster without bark, and pieces with small diameters will air-dry quicker than large chunks. Halving or quartering the large pieces will speed the seasoning process.

Firewood stacked in the open seasons faster than wood stacked under bushes, near buildings or in a damp cellar. When stacking wood, prevent contact with the soil, Walters cautions. Wood touching the soil soon decays, and decayed wood has less fuel value than sound wood.

Don't stack wood against buildings, since termites may attack it and later gain entrance to the building. A cover, or closer stacking of the top pieces, helps to protect firewood from rain and snow.

To maintain a good fire in the fireplace, Walters advises using a heavy backlog 8 to 10 inches in diameter. The other pieces need be only 2 to 4 inches in diameter.

Pieces of wood larger than 8 to 10 inches in diameter and 16 inches long are too large for most fireplaces. Most wood over 10 inches in diameter should be halved or quartered to keep it "wife size."

Much of the heating value of fireplace wood is lost in heating the great volume of air that passes out of the room through the chimney. Closing the chimney damper to the point where there is only enough draft to carry the smoke up the chimney will conserve heat, Walters says.

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Most of the required air should be supplied to the surface of the fuel bed. So don't let ashes accumulate to the point where they rise above the tops of the andirons or become thick in the bottom of the iron basket. The wood will burn too quickly if all the ashes are removed. With an ash bed of proper height, a thick bed of glowing embers will form that will keep the fire burning and quickly ignite fresh fuel.

Additional information on fireplace wood is available from the Department of Forestry, University of Illinois, Urbana, Illinois.

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NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE THURSDAY P.M.,
NOVEMBER 19, 1964

Switch To Confinement Swine System Is No Guarantee Of Success

URBANA--A University of Illinois agricultural economist today noted that the switch to confinement raising of hogs carries no guarantee of success.

"The hog growing-finishing facility that pays best depends on the individual farm resources, the hog program and, most important, the ability of the manager," economist D. F. Wilken pointed out during the annual Farm Structures Day program on the U. of I. campus. "There is no magic type of growing-finishing facilities."

Wilken cited results of U. of I. and Purdue University research that showed little difference in returns per $100 worth of feed fed for today's three most common swine-growing system--all-pasture, pasture to 175 pounds with hogs finished in confinement, and all-confinement.

"These studies suggest that, if there are differences between the all-confinement system and the traditional systems of hog production, they are related to factors other than feed cost," Wilken said.

The U. of I. economist pointed out that the high-investment confinement swine system will tend to meet the needs on a farm that has moved or is moving toward a high volume and intensity of hog production and where labor or the ability to supervise labor is short.

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"This system does not reduce cost significantly, and so does not widen the profit margin," Wilken explained. "But it does increase the number of hogs that one man can raise, and therefore produces a higher total return.

"On the basis of budgets we have prepared, a 160-acre tenant hog farmer should be able to improve his net income by about $100 per month by increasing from 62 to 100 litters with a confinement hog rearing-finishing facility."

Wilken said that this type of confinement swine system calls for high capital investments and a high level of management. He noted that some farmers who have shifted to confinement systems have not been successful, especially the early adopters.

"However," he added, "any technique that increases the productivity of fixed resources, such as land or labor, at costs that compete with those in other techniques will tend to be adopted and used by the successful producer. So long as the confinement system can meet this test, it is likely to increase as a system for raising hogs on Illinois farms."

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NOVEMBER 19, 1964

Three Swine Manure-Handling Systems Appear Satisfactory

URBANA--A major decision facing farmers who are considering a switch to a confinement swine-raising system involves selecting an economical, trouble-free manure disposal system.

And, although all the answers aren't in, three hog manure-handling systems appear to be evolving as "satisfactory," University of Illinois agricultural engineer A. J. Muehling explained today during the annual Farm Structures Day program on the U. of I. campus.

Muehling said these systems are (1) hauling manure to the field and spreading, (2) running the manure into a lagoon and (3) a combination of the two.

"There is more interest now in hauling liquid manure to the field in tank wagons than there has been at any time in the past few years," Muehling explained. "Producers are using augers, vacuum pumps, centrifugal pumps and gravity to fill the 500- to 1,300-gallon tank wagons."

Muehling pointed out that the way feed is ground and the amount wasted can play an important part in determining how well liquid manure will flow from the storage pits. Feeding coarsely ground feed seems to cause the solids to settle out. They are difficult to remove from the pit. No severe problems have occurred with finely ground feed.

Muehling noted that lagoons have lost some of their popularity in the past few years.

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"Much of the bad publicity we've heard about lagoons has been due to such gross misuses as overloading and locating them too close to homes," Muehling said. "With proper management lagoons are working reasonably well for many hog producers."

The U. of I. engineer said that copper sulfate, a common feed additive, has recently been found to have a detrimental effect on lagoons. In sufficient quantities, copper sulfate is toxic to the bacteria that stabilize wastes.

Muehling said that a combination of lagoons and field hauling is popular among the larger hog producers. Under this system, the farmer can haul manure to the field when time and weather permit. However, if he is busy in the field or if the weather is bad, he can let the storage pit fill up. The liquids run out the overflow, and the solids remain in the pit until they are hauled away at the farmer's convenience.

"This method allows the producer to get some of the fertility value from the manure and still haul it in his free time, "Muehling explained. "It also takes a major load off the lagoon, allowing the smaller ones to operate satisfactorily without producing too much odor."

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NOVEMBER 19, 1964

Future Still Good For Poultryman Who Can Produce Eggs At Minimum Cost

URBANA--While the "table egg" laying hen population is declining in Illinois, the future is still good for the sound operator who has the facilities to produce a dozen eggs at a minimum total cost, reported Max J. Petzenhauser, farm structures engineer for the Ralston Purina Company, St. Louis, today at the University of Illinois Farm Structures Day.

Certainly a good housing system is a significant factor in improving feed efficiency, livability, egg quality and productivity, Petzenhauser says.

"Too many times, however, the bird is forgotten in designing the housing system," Petzenhauser emphasizes. "Since she is basic to the system, all other factors must be considered with a view to economically providing the best conditions for egg production."

Costs continue to be significant when a new laying facility is being considered, but there is an important difference between a cheap unit and an economical unit, Petzenhauser points out. To reduce costs, the effect on the system's performance and profitability should first be analyzed.

One way to reduce costs, he says, is to crowd the birds tighter on the floor or in the cage, but each step in crowding reduces productivity. Thus there is an economic limit to cost-cutting practices.

Costs of complete laying systems vary greatly, Petzenhauser reports. The cost ranges from $1.50 to $4.00 per bird, with obvious inequalities as a result.

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"It is not enough to be sure that we are comparing apples with apples," Petzenhauser says. "We must make sure not to compare the Delicious apple with the crabapple."

Competition in the construction of farm buildings is increasing. Specialized building and complete systems are being prefabricated and transported to the job site. Because of this specialization, systems are offered at attractive prices.

Although the poultryman is usually eager to deal with local people, Petzenhauser says, economic factors dictate that local contractors must compete favorably with outside sources to get the poultryman's business.

Selection of type of housing and other related matters must be made on merit, with adaptability to the individual farm situation in mind. The key to this selection is still the bird, Petzenhauser believes. For maximum potential profits, the system must be designed around her. She will always react favorably when given a favorable environment.

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FOR IMMEDIATE RELEASE

UI Sheep Day Program Set For December 11

URBANA--Results of the latest U. of I. sheep research on protein supplements for feeder lambs, high-concentrate diets for gestating and lactating ewes, intensive sheep production and rations using urea as a protein source highlight the annual University of Illinois Sheep Day program set for December 11 in Urbana.

Other high-interest program topics include discussions of ewe estrus control and superovulation, lamb carcass evaluation, specific parasite-free lambs, the market outlook and reports of field observations of lamb feeding and fall lambing.

Program chairmen G. E. Ricketts and G. R. Carlisle say the day will begin with an optional open house at the U. of I. sheep farm facilities and metabolism laboratory. The program begins at 10:00 a.m. in the Stock Pavilion with a welcome by R. O. Nesheim, head of the U. of I. Department of Animal Science.

Featured speaker for the program is G. W. Litton, head of the Virginia Polytechnic Institute Department of Animal Science. Litton will discuss VPI research in intensive sheep production.

Eleven U. of I. specialists will present papers during the program, which is scheduled to end at about 3:15 p.m. The U. of I. Hoof and Horn Club will serve lunch in the Stock Pavilion at noon. The annual meeting of the Illinois Purebred Sheep Association will begin immediately after the Sheep Day program.

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FOR RELEASE THURSDAY P.M.,
NOVEMBER 19, 1964

Egg Industry Revolution Gives Poultry Business New Look

URBANA--The revolution that began in the egg industry in the mid-1950s has brought far-reaching changes in poultry housing, automation and flock management.

"These rapid changes are giving the poultry industry a new look," said S. F. Ridlen, University of Illinois extension poultry specialist, in addressing a Farm Structures Day audience at the University Thursday.

Historically, the laying flock in Illinois has been the housewife's responsibility, Ridlen points out. She kept, fed and cared for the hens and used the egg money to buy groceries. Any money left over from household expenses was her pin money. While this system worked well, it caught the midwest unready when the revolution broke out.

The demand for better quality eggs and narrower profit margins dried up market outlets for the small flock owner, and the farm flock began to fade from the picture. Many farmers overlooked the profit potential of chickens when managed on a big business basis, Ridlen explains.

A continuing study initiated by University extension poultry specialists in 1962 reflects the current poultry picture in Illinois, Ridlen reports. Generally it shows that the small farm flock will almost disappear from Illinois, to be replaced by larger farm flocks of 7,500 to 10,000 hens and large commercial flocks.

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Also, while it is not likely that Illinois will ever produce enough eggs to supply its own needs, the deficit in egg production will probably be reduced because of good nearby markets, such as Chicago and St. Louis, and abundant feed supplies.

Commercial-sized flocks have increased until at present there are 1,511 flocks recorded in Illinois ranging from 1,000 to 100,000 hens. Two operations now exist with about 100,000 hens each, and both are scheduled to increase to about 200,000 or 300,000 hens. It would be hasty, however, to say that all flocks will become so gigantic, Ridlen says.

Even though the number of big flocks is increasing, general farm flocks are decreasing even faster, causing a declining hen population and an egg deficiency that is growing larger.

Most commercial flocks are housed in new buildings of the environmental control type. Most of these buildings are conventional one-story, clear-span, stud-frame laying houses, Ridlen says. Insulation is now considered a must in Illinois poultry housing, with a minimum of two inches of insulation recommended for sidewalls and three inches for the ceiling. Vapor barriers also are considered essential, he adds.

Aluminum and sheet steel are the most popular exterior siding materials. Interior sheathing is often a durable hardboard, but there is a recent move toward use of metal for ceilings to speed cleaning. Houses are usually 35 to 40 feet wide for floor operations and 32 feet or more for cages. The trend is toward windowless housing, with exhaust systems widely used for ventilation.

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Cages are being installed almost exclusively in Illinois today, Ridlen reports. These systems feature mechanical watering, use of hand or power feed and egg carts and manual or tractor removal of manure.

Some multideck automated cage systems are in use, and flat or single-deck automated arrangements are increasing, Ridlen says. These systems usually include egg collection belts and manure removal equipment. However, the most popular system is still the stair-step arrangement.

With Illinois producing just over a million turkeys per year, there is room for expansion in this area, Ridlen believes. Turkey producers are switching from range to confinement rearing, so there is greater interest in insulated, mechanically ventilated houses, increasing the market for turkey housing.

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FOR IMMEDIATE RELEASE

UI Research Contributes To Bountiful Harvest

URBANA--For most people the very mention of Thanksgiving calls up memories of kitchens fragrant with the cooking of savory foods and pantries crowded with good things to eat. We think of a family day of happy reunions and a table laden with a meal that might fortify you for a week.

Research by University of Illinois scientists has done much to create a more bountiful harvest and add to the eating pleasures of Thanksgiving Day as well as every other day of the year.

The succulent golden brown turkey waiting to be carved is a tradition going back to the Plymouth colony when a plentiful corn harvest followed a dreadful first winter, bringing new hope to the colonists and prompting them to give thanks with a harvest festival.

The tradition of turkey at Thanksgiving is the same, but the bird itself is a far cry from the one brought down with a shot from a Pilgrim's blunderbuss or brought to the feast by a friendly Indian.

Breeding and nutrition have developed a family-sized bird with shorter legs, a larger body and a broader, plumper breast. Marketed at a young and tender age, it needs less roasting time than the mature Thanksgiving bird Grandmother prepared after patiently fattening it for weeks.

University of Illinois animal scientists, in working with the energy utilization of feeds, have determined the factors that contribute to the rapid growth and early fattening of poultry, making this early marketing possible.

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If a casserole of corn or succotash may be part of your menu, as they were at the Plymouth feast, it may be made from one of the 19 white sweet corn varieties out of 20 or the yellow sweet corn variety in five that was developed through work done by University of Illinois horticulturists.

Other foods became traditional at Thanksgiving dinner as farm produce became more diversified and could be stored by the farmer in the cellar or by his wife on her preserve shelves.

The whipped potatoes waiting for savory giblet gravy are particularly abundant because Illinois horticulturists have helped potato producers increase the yield six times over by developing the proper use of DDT in controlling leafhoppers. Research has also made it possible to increase the starch content of potatoes 9 to 13 percent.

Sweet onions, firm, translucent and swimming in cream often appear on Thanksgiving tables. University of Illinois researchers, primarily through the use of hybrids, have increased onion production from 400 to 1,000 bags per acre.

The smooth, spicy pumpkin pie waiting on the sideboard may possibly be made of a pumpkin variety improved by the work of University horticulturists. Using a "genetic bridge" technique, they have produced the necessary characteristics to make mildew-resistant pumpkin varieties. Work is now in progress on bush-type pumpkins that will need less growing space than the common vine types.

Thus research continues so that the harvest we reap next year may be greater and the table we set to celebrate this bounty may be better than ever before. Sweet potatoes, which are often a part of

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Thanksgiving feasts, may soon be Illinois-grown. Trials are under way near East St. Louis now to check varieties adapted to Louisiana to see whether they can be successfully grown in this state. If so, Illinois truck farmers may have an additional crop soon.

The apple pie waiting beside those of pumpkin and mince may be made from improved varieties. A long-term breeding program by University of Illinois horticulturists is near fruition. Its purpose is to produce high-quality scab-resistant apples by crossing an Asiatic ornamental crabapple with commercial varieties.

Illinois' bountiful harvest is the product of many things--the deep, black soil with which we are blessed, the industry of our farmers and the never-ending quest of University of Illinois researchers for the hidden answers to ways to make agriculture better.

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11/17/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

New Varieties Top Illinois Oat Trials

URBANA--Three new varieties--Brave, Garland and Clintland 64--shared top honors with the high-yielding Shield in University of Illinois oat trials this year, announces oat breeder C. M. Brown. The U. of I. agronomist carried on these tests as part of a program aimed at bringing the best possible varieties to Illinois oat growers.

Garland and Shield tied for top honors in the trial at the Northern Illinois Research Center in DeKalb county. Both averaged 105 bushels per acre. These two varieties have been regularly beating out other varieties for the past several years. Shield has an outstanding yield record both in test plots and in farmers' fields. Garland, a newcomer, appears to yield just as well and also has outstanding straw strength and improved rust resistance. Other top varieties ran close behind these two, with yields at about the 100-bushel-per-acre mark. They included the "old faithful" Newton as well as Brave and Clintland 64, two new varieties just out of the breeding nurseries. Each showed its ability to perform well in competition with over 20 other varieties in this trial.

At Urbana, Brave came up to share top honors in central Illinois tests with Shield. Less than a bushel difference separated their yields. Garland and Clintland 64 followed close behind. All of these varieties yielded over 90 bushels per acre.

In south-central Illinois at the Brownstown Research Center in Fayette county, Brave led all varieties, with Clintland 64 and the early Putnam 61 close behind.

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Illinois agronomists were pleased with the yield record of Brave, a variety developed by Brown at Urbana. It shows great promise for central and south-central Illinois, and it should hold its own in northern Illinois, says Brown. In addition to high yield capacity, Brave has excellent rust resistance. Its straw strength is adequate but not equal to that of Goodfield or Garland. Brave's strongest feature may well be its ability to resist yellow dwarf virus, the disease that devastated Illinois oat yields in 1959. Foundation seed will be released to certified seed growers next spring, says Brown.

Agronomists were also encouraged by the performance of Clintland 64, the newest version of the series of Indiana varieties that has included Clintland and Clintland 60. Clintland 64, released this year, has better rust resistance than its predecessors. The strong performance of this variety at all three test sites suggests a fine future for it in Illinois, Brown points out.

Several special-purpose varieties also did well at one or more test sites. They included the stiff-strawed Goodfield--designed for fields where lodging is often a problem--and Putnam 61, a week earlier than Newton in maturity and well suited for use by oat growers seeking an earlier variety.

Newton, a dependable old-timer, showed that it could still hold its own in yield trials. Several of the new varieties may yield a few bushels more and have a little better disease resistance, but Newton is still a fine oat variety for Illinois, says Brown.

These new varieties will bear watching, says the agronomist. In Brave, Garland and Clintland 64, Illinois farmers are seeing a new generation of oat varieties. Each has outstanding yield capacity combined with disease resistance. "The chances are that you'll see a great deal more of these varieties in the coming years," concludes Brown.

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UNIVERSITY OF ILLINOIS
AGRICULTURAL CONFERENCES
Urbana, Illinois

COLLEGE OF AGRICULTURE and the
DIVISION OF UNIVERSITY EXTENSION

FOR P.M. RELEASE DECEMBER 3, 1964

Special Coverage
5th Annual Turf Conference

Maintain Balance When Pruning Trees And Shrubs

URBANA--More harm than good can be done by improper pruning of trees and shrubs. The average homeowner tends to overprune; by removing too much of the top growth, he destroys the balance between top and root growth. When not enough leaf surface remains to support extensive rooting, the root system is weakened, reported J. B. Gartner, head of the University of Illinois division of floriculture and ornamental horticulture, at the 5th annual Turfgrass Conference here today.

Gartner proposed the following maintenance calendar for trees and shrubs:

Winter. Now is an excellent time to start a pruning program, especially on non-flowering trees and shrubs that flower on new growth. Remove all dead, diseased or interfering branches at this time. Cut them flush, and paint all wounds two inches or more in size with an asphalt-based paint. But don't prune trees and shrubs that flower early in the spring or that flower on old wood. Pruning now will destroy the flowers.

Apply fertilizers, if needed, using a 10-6-4 fertilizer at the rate two pounds per 100 square feet of bed area for shrubs, and one-half pound of nitrogen per inch of trunk diameter for trees.

Mulching in late fall or early winter prevents freezing, thawing and heaving.

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Spraying with a dormant oil during the winter months will control scale, red spider and other insects.

Spring. After they bloom, prune all shrubs that flower on old wood, or other plants that flower prior to the first of June. Included in this group are early-flowering trees, such as flowering crabs and magnolias.

Transplant all thin-barked trees early in the spring and all deciduous material prior to leafing out.

Summer. Irrigate all transplants during stress periods. Prune all hedges and shrubs. Remove the wild leaders in order to maintain proper shape. Spray biweekly with malathion and captan to prevent a buildup of insects and diseases.

Fall. Transplant balled-and-burlapped stock in early fall. Wait until after frost and dormancy to transplant bare-root deciduous stock. Irrigate all transplants so that an adequate root system will form before dormancy.

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JJF:ml
11/20/64

FOR A.M. RELEASE DECEMBER 4, 1964

Special Coverage
5th Annual Turfgrass Conference

Insist On Quality Seed

URBANA--Considering the labor, equipment, soil, irrigation, fertilizer and other costs involved in establishing turf, the cost of seed is a small item. But in far too many cases excellent care is given to all details of preparing the seedbed, only to ruin the entire operation with a "bargain" lot of inferior seed, Oregon State University crops specialist Norman Goetze told the 5th annual Turf Conference here today.

Both the Federal Seed Act and the Illinois Seed Law were originally designed for field seed crops. Many of the weeds listed as noxious in Illinois are less troublesome in turfgrass than such common weeds as annual bluegrass and crabgrass or small amounts of other crops, such as tall fescue in creeping red fescue or bentgrass in Merion bluegrass, Goetze pointed out. Low contaminations of other crops or common weeds may not be readily recognized by inspection of the seed label, he added. Unfortunately, prices are most often quoted on standard purity and germination percentages, with little regard to other crop and weed content.

For those who are vitally interested in freedom from other crop and weed content, specifications should be provided for zero crop and zero weed analyses, Goetze advised. Reputable seed dealers will provide detailed laboratory work sheets to support the sale of their best quality seed lots, he added.

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Buying certified seed is the only sure way of getting a certain variety. According to both federal and Illinois laws, certified seed must bear the tag of the agency making the certification; it must meet rigid physical standards and must have a known genetic history. The customer can then be reasonably sure that the seed will perform as expected.

Various state and governmental certifying agencies have different requirements for eligibility of seed to receive certification tags. The customer must become familiar with the procedures used by the various agencies to judge the quality of the certified seed in terms of varietal performance.

All commercial customers of turfgrass seeds cannot hope to become proficient seed technologists. But it is their responsibility, said Goetze, to become aware of the variations in quality of turfgrass seed and to become familiar with the legal protection available to them in choosing better quality seed.

Since seed is one of the lowest cost items in the total turfgrass management operation, use of good-quality seed is one of the best ways to improve the overall quality of Illinois turfgrass, Goetze concluded.

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11/20/64

FOR P.M. RELEASE DECEMBER 3, 1964

Special Coverage
5th Annual Turf Conference

Don't Grow Grass "Too Green"

URBANA--Even though the slow-release nitrogen fertilizers may be a desirable way to supply the nitrogen needed to grow green grass, such fertilizers do not help to keep grass from growing too green for its own good, reported turf specialist C. W. Lobenstein of Southern Illinois University at the 5th annual Turf Conference here today.

Slow-release nitrogen fertilizers have been a useful and welcome addition to the tool kit of turfgrass management. The ability to provide more continuous feeding instead of the quick stimulation provided by more soluble materials should lead to better turf health, said Lobenstein.

At the same time, many turfmen must still use moderate amounts of the quick solubles or even spray-on applications to get that "quick kick" to keep the color up and the user happy. Without a knowledge of the interacting factors regulating foliage and root growth, however, all three forms can still cause serious trouble, cautioned Lobenstein.

Green color doesn't always reflect a balance between good foliage and root. As an example, Lobenstein cited the long-term fertility experiment on bluegrass conducted at Dixon Springs in cooperation with the University of Illinois.

The experiment was set up on low-phosphate soils of desirable structure, which received supplemental irrigation only once during the summer. In the various combinations that were used, plots receiving

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high nitrogen rates in monthly applications always rated highest from the standpoint of color, regardless of what levels of phosphorus and potassium were used. But when drought stress took its toll, the high-nitrogen plots lost the most grass. By the end of the season, they ranked lowest in thickness of stand.

To maintain good turf foliage and root balance, Lobenstein advised following these steps:

Clip as high as possible, depending on the type of grass and its use.

Control diseases. Diseased leaves cannot support adequate root growth or use of the turf.

Be sure phosphorus and slowly soluble nutrients are distributed adequately throughout the root zone.

Supply other essential nutrients in proper balance and quantities.

Regulate pH and water with common sense.

Insure good aeration. Roots cannot grow without air.

Keep nitrogen levels as low as possible without causing the grass to completely lose its ability to recover when climatic and disease factors become more favorable.

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11/20/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS   COLLEGE OF AGRICULTURE   URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Trend Toward Eating Out Increases Beef Used By Chicago Restaurants

Beef was the preferred meat of customers dining in 119 Chicago hotels and restaurants surveyed recently, reports M. B. Kirtley, University of Illinois agricultural economist. Nearly 60 percent of the estimated total meat ordered per week was beef.

Poultry was second highest in demand, representing 14.8 percent of the total meat purchased. Fish and pork each accounted for nearly 10 percent of the total.

The number of meals eaten outside the home has been increasing for several years, Kirtley says. By 1960 about one in four meals in the U. S. was eaten away from home.

Many economic and social factors have contributed to this trend, Kirtley believes. Among them are higher incomes with a greater demand for service, more travel for business and pleasure, more use of public facilities, such as schools and hospitals, and the move to suburban areas, placing the home farther from the office.

In buying meat to supply this increased business, restaurant owners stressed the importance of a high and uniform quality. About 55 percent of the firms bought both Prime and Choice grades, using USDA grading methods as their guides. Many firms said that Prime beef was too costly and wasty. Choice beef, while closely approaching Prime, was more economical and satisfactory for their operations.

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Most of the meat was supplied to restaurants by specialized wholesalers. In selecting a supplier, the most important criterion of 82 restaurants was service. Quality of meat was considered most important by 70 restaurants, and price was listed as most important by 43.

Pre-cut portion control items were important to most restaurant firms. More than half bought some items in pre-cut form, while one-fourth expected to use more pre-cut items in the future.

Kirtley says that the trend toward eating out may be expected to continue and will have significant effects on the livestock and meat industry. The major demand will be for beef of higher grades, but cost control will require a minimum of waste, especially in excess fat. To avoid such costs, restaurant managers will give more exact specifications when placing orders.

The demand for pork will probably be weakened, Kirtley says. The average volume of pork used by eating places is too low for a wholesale meat operation to specialize in pork.

Development of portion control items aggressively merchandised however, would help to strengthen the position of pork in this market, Kirtley believes.

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11/24/64

FOR IMMEDIATE RELEASE

All-In, All-Out Poultry Replacement Reduces Risks Of Disease, Low Performance

The all-in, all-out poultry replacement program, when combined with top-quality pullets and good husbandry, can reduce the risks of disease and poor performance in the farm flock, according to Hugh S. Johnson and S. F. Ridlen, University of Illinois extension poultry specialists.

Many Illinois poultrymen keep chickens of different ages and from different sources on their farms at the same time. This arrangement has advantages in fulfilling the continuous need for certain egg sizes and in spreading the cost of populating the farm over a longer period of time. The disease and low performance which often result, however, nullify the advantages, Johnson and Ridlen believe.

Poultrymen may start with a clean flock of pullets in a clean house, but the birds may be chronic carriers of disease to which they have become resistant. Thus they show no signs of disease.

When additional broods of pullets are introduced, they may also carry disease that they are able to fight off. They exchange some of these disease organisms with the first brood. The more broods you introduce, the worse the problem gets, Johnson and Ridlen say. Eventually the different organisms build up so that one or a combination of them may overpower the pullets.

The affected birds will not peak at a high rate and will not perform well even with medication.

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Part of the answer to the chronic disease problem is to replace the whole flock at one time, Johnson and Ridlen state. For the replacement system to be completely successful, however, the poultrymen must start with the pullet rearing program. To avoid cross contamination, only pullets that have been grown together should be housed together.

Comparisons of multiple age systems and all-in, all-out programs in such states as California and South Carolina show an advantage of 20 to 30 eggs per hen per year for birds on an all-in, all-out program.

Making the change to an all-in, all-out system may mean operating at a reduced capacity for a time, keeping an older flock longer than you desire, or selling a younger flock sooner than you planned. But one advantage besides getting maximum performance from your flock, Johnson and Ridlen point out, is that it gives you and your family a break from the 52-week-a-year job when you replace the old flock with a new one.

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11/24/64

FOR RELEASE A.M. DECEMBER 4, 1964

Special Coverage
5th Annual Turf Conference

Use Herbicides To Supplement Weed Control Efforts

URBANA--In the long run, good turf is the answer to most weed problems, with chemicals used as a supplementary practice, reported University of Illinois researcher F. W. Slife to the 5th annual Turf Conference here today. Although chemicals may be the best way to eliminate weeds, they will probably reappear unless the cause of the invasion is corrected, Slife added.

The Turf Conference is sponsored by the Illinois Turfgrass Foundation and the U. of I. College of Agriculture to provide up-to-date information for those in the turfgrass field.

Slife says the following chemicals--all new or relatively new--appear to have a place in controlling specific weed problems in turf:

MCPP has been used rather widely this year. It controls white clover, chickweed and knotweed exceptionally well. This herbicide is closely related to 2,4-D. Like 2,4-D, MCPP will occasionally injure bluegrass turf if it is applied during very hot weather and at heavier-than-recommended rates. On the golf course, bentgrass greens and fairways appear to have more tolerance to MCPP than to 2,4-D. It is therefore best to apply this material again in the spring or early summer before temperatures become exceptionally high.

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Betasan, a pre-emergence crabgrass killer, was not widely available this year, but is expected to be more plentiful in 1965. It is excellent for controlling crabgrass in both bluegrass and bentgrass. Betasan treatments will injure newly established bluegrass and bentgrass stands, but established stands are quite tolerant. Silver crabgrass also seems to be sensitive to it. Betasan appears to be the best material available today for treating golf course greens and collars. It apparently has a long soil residual. There may be a carryover the next season. Slife recommends a rate of 10 to 15 pounds per acre.

Tupersan, a new pre-emergence crabgrass killer, will apparently be available next year. On established bentgrass, fescue and bluegrass turfs, it appears to give excellent control of most annual grasses, including foxtail, crabgrass and silver crabgrass. U. of I. studies indicate that silver crabgrass requires higher rates of Tupersan than ordinary crabgrass, and Poa annua, either germinating from seed or established, appears to be quite tolerant.

The germinating grass seedling of Illinois' desirable turf grasses seems to be highly tolerant to Tupersan. Rates of seven pounds per acre or below have not reduced the germination or seedling vigor of Kentucky bluegrass, creeping red fescue, tall fescue, redtop or bentgrass. Researchers obtained excellent crabgrass control at both 4- and 7-pound rates.

It appears that Tupersan could have an important place in establishing new lawns and also might make it possible to establish lawns throughout the summer. This material controls many broadleaf weeds, but not so well as it controls annual grasses. Slife suggests a trial rate of 6 to 8 pounds per acre, applied on the soil surface immediately after planting.

Azak, another new pre-emergence crabgrass killer, was not widely available this year. It appears to give excellent control of crabgrass in established bluegrass. At the recommended rate of 10 pounds per acre, it appears that established bluegrass is quite tolerant. The tolerance of established bluegrass to more than the recommended rates has not been definitely determined.

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11/24/64

FOR RELEASE P.M. DECEMBER 3, 1964

Special Coverage
5th Annual Turf Conference

Fusarium Blight Reported

URBANA--Fusarium blight, which damages turfgrass stands under favorable conditions of temperature, moisture and soil fertility, has been observed in Illinois on Kentucky bluegrass, University of Illinois plant pathologist M. P. Britton told the 5th annual Turf Conference audience here today.

Fusarium blight is apparently most severe when the turf is grown under high nitrogen or deficient calcium levels. It usually occurs during hot, humid weather in July and August.

In Kentucky bluegrass lawns, the disease commonly appears in circular patches, rings or partial rings varying from a few inches to over two feet in diameter. Characteristically, the grass in these areas is light yellow-green at first but rapidly becomes light tan as it is killed. Examination of the crowns, roots and rhizomes during this period shows extensive rot. Pennsylvania researchers report that the fungicide Dithane M-45 has given some control of the disease, Britton said.

Britton also reported on two leaf spots, red leaf spot and Helminthosporium leaf spot, appearing in bentgrasses in Illinois.

Red leaf spot has a straw-colored center surrounded by a reddish-brown margin. Sometimes only the reddish-brown discoloration is seen. Infected leaves usually turn light green and then yellow before they wither and die. Infected areas can be readily seen because of the yellowish cast given the turf by the diseased leaves. Red spot

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occurs most commonly in late April and May but may also be active in October and November. Two or three applications of zineb at the rate of 2 to 4 ounces per 1,000 square feet have controlled this disease adequately, reported Britton.

Helminthosporium leaf spot first appears on bentgrass as minute water-soaked areas that develop into small, circular, brown spots surrounded by a yellowed zone of leaf tissue. This yellowed zone later turns dark brown, and the central brown area becomes tan. Leaf spots may be so numerous that the leaves wilt and die, thinning the turf. Under extremely hot, wet conditions, leaves may become blighted without the formation of typical leaf spots. This blighting involves the entire leaf and is first evident in wilting of the leaves, even though the soil has abundant moisture.

Helminthosporium leaf spot has been isolated from bentgrass during every month from April to November. But the disease usually does little damage until July and August, when the weather is usually hot and humid.

Turf specialists at the University of Illinois turf plots have controlled this disease with several fungicides applied once a week on a preventive schedule. Dyrene, Difolitan 80W and Dithane M-45 should control the disease on golf course putting greens, Britton concluded.

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11/24/64

FOR IMMEDIATE RELEASE

Adapt Serving Method To Number Of Guests

URBANA--By simply changing your serving style you can often solve the problem of handling a holiday dinner bigger than your dining facilities now permit.

University of Illinois home economist Bette Schaffner says that there are basically three styles of serving: American family style, Russian service and buffet.

American family style calls for the roast to be carved by the head of the household. He serves the meat along with the vegetables on the plates that are stacked before him. Salad plates and salad bowl go before the hostess for serving. When there are many people to serve, the roast may be carved in the kitchen to save time and ease the pressure on the host. Food may then be served by the host, or the serving dishes may be passed so that each diner can help himself. Family style is a friendly way to serve if both your dining room and table are large enough.

If, however, your dining facilities are limited, you might try the so-called Russian service. Entree plates are served in the kitchen and brought to the table. You probably have used this simplified method of serving many times.

The third type of service, the buffet, can range from very formal to informal. In formal buffet service, each diner has a place set for him at a damask-covered table, but all of the food is arranged on a sideboard or buffet. In theory, each guest is served by a maid or

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butler. A current adaptation of this service calls for the host to do the serving from the buffet while the hostess carries the conversational ball.

In a less formal service, everyone helps himself from the buffet table. Guests can be seated around a single table or at card tables, or individual tray tables can be set up wherever space permits. Be sure that each guest has a place to put his plate and cup and saucer after serving himself.

No matter what style of serving you use, remember that food always tastes better in a warm, festive setting.

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11/27/64

FOR IMMEDIATE RELEASE

Make Your Own Christmas Gifts

URBANA--Handmade Christmas presents bearing your own hallmark have a special appeal because of the time and effort you put into them. If you're looking for a simple, practical, inexpensive item to make, try small wooden cork-topped table pads for hot dishes.

University of Illinois wood technologist Charles S. Walters suggests that you make the pads in sets of three different sizes. Squares or rectangles are simple to cut, but you may wish to vary shapes for interest.

If you do not have suitable wood at home, buy close-grain walnut, cherry or hard maple. Pine or quartered sycamore may also be used.

For a set of three pads, 5 x 5, 5 x 7 and 5 x 9, you will need a piece of 1 x 6 lumber, 24 inches long. You can simplify your work by having the wood cut to size and dressed to 1/2-inch thickness at the lumber yard. This millwork will cost about one dollar at local shops.

However, if you do all the work yourself, follow these steps:

1. Plane lumber smooth on both sides to a thickness of about 1/2 inch.

2. Cut pieces to size.

3. Sand all surfaces smoothly.

4. Apply finish. Wood may be stained or finished clear, but use a dilute solution so that grain will be visible. Pressurized cans of varnish, such as polyurethane, may be used. Quick-drying clear lacquers also come in pressurized cans. Since the top will be covered with cork, only a one-inch top border need be finished. Sand between

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each coat of finish with 400-grit paper. Be careful not to sand through varnish. For a satin finish, sand final coat lightly. If you prefer a heavy gloss, do not sand final coat.

5. Using a contact adhesive, apply cork cut to size. Cut cork 1/2 inch smaller than length and width of the board to allow for a 1/4-inch border of wood. Since the adhesive will remove finish, use care in applying it. Follow instructions on the container carefully. After the cork is glued on, use a small steel square and a razor blade to finish the 1/4-inch border if trimming seems necessary.

6. If you wish to mark the pieces with your name or initials, use India ink for lettering before you apply the finish.

Your time and labor will mean handsome gifts that are certain to be welcomed in any home.

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11/27/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Scientists Name Corn Virus Disease

URBANA--Scientists meeting at Wooster, Ohio, have officially named a serious virus disease of corn that may pose a threat to the corn crop in Illinois and other corn-belt states.

The disease, which is now officially known as "maize dwarf mosaic" was first found in Ohio in 1962, according to scientists from the University of Illinois and the Natural History Survey. They have just returned from a two-day conference at the Ohio Agricultural Experiment Station, where all aspects of the disease were discussed by more than 100 scientists from 32 states and Canada.

The name maize dwarf mosaic was picked to distinguish the disease found in Ohio from corn stunt, a disease known to occur in the southern United States.

The newly discovered disease has been reported in seven southern Illinois counties--Pulaski, Alexander, Massac, Union, Jackson, Calhoun and Wabash--as well as in Kentucky, Indiana, Missouri, Iowa, Tennessee, California, Virginia, North Carolina, South Carolina and possibly other states.

Ohio farmers suffered an estimated yield loss of five million bushels this year. Losses in other states were much less. About 2,000 acres were found to be infected in southern Illinois; about half of the acreage was in Pulaski and Alexander counties. The new disease reduced

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the corn crop by 70 percent or more on about 400 acres in extreme southern Illinois. On another 400 acres the loss varied between 5 and 50 percent. Only a trace or light infection was found on the remaining acreage.

Aphids have been found to carry the disease from one plant to another. Scientists are concerned about further spread of the disease.

Workers at the conference agreed that the development of resistant varieties seemed to offer the best and most lasting means of controlling the disease. Most corn varieties now grown were found to be susceptible to the new disease. Workers are hopeful that suitable replacements for the most susceptible types can be developed. No one at the conference could say with certainty how long such development would take.

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12/1/64

FOR IMMEDIATE RELEASE

U. Of I. Demonstration Shows Importance Of Watering Christmas Trees

URBANA--A University of Illinois safety demonstration has dramatically illustrated the importance of watering the family Christmas tree.

U. of I. safety specialists set fire to two groups of Christmas trees. One group had been watered during two-week storage under normal household temperature and humidity conditions. The other group had not received water.

Trees that had absorbed water from containers at their bases during storage were slow to ignite and showed little fire damage to foliage at the end of the test.

Trees stored under the same conditions, but without water, burst into flame almost immediately. Within 12 to 20 seconds they were reduced to smoldering, blackened skeletons.

U. of I. safety specialist O. L. Hogsett points out that homeowners who don't cut off the butt ends of their Christmas trees and keep the trees watered are taking a chance. Water won't make the trees fireproof, but it will lessen chances of a fire.

The water containers should be checked often. In the U. of I. test, watered trees used between 11 and 13-1/2 quarts of water during the two weeks they were stored under normal household temperature and humidity conditions.

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Hogsett says it's also a good idea to make sure the Christmas tree is as fresh as possible when you buy it. It's often difficult to check tree freshness. However, trees grown in your local area will usually be fresher than trees brought in from a distance.

Other important precautions to take while your Christmas tree is in the house include using only approved electrical lighting and fireproof decorations and placing the tree in a corner or an area of the room away from fireplaces or bright lights. Also never smoke near the tree, and be sure to unplug Christmas tree lights overnight or when you are away from the house.

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12/1/64

FOR IMMEDIATE RELEASE

Locally Grown Christmas Tree
Usually Freshest

URBANA--Most Christmas tree lots will open during the first week of December. If you're looking for a fresh tree, insist on a locally produced pine. Local trees are cut on demand. Northern trees have been in storage or in shipment for some time, says University of Illinois extension forester Ted Curtin.

Shopping early usually means better selection, says Curtin. But even if you wait, you needn't worry about needle retention if you select a pine.

Firs, while they usually hold their needles well, have to be cut early for shipment. Sometimes they shed needles excessively. Spruce trees do not hold their needles well. Don't cut or buy them in early December if you expect them to be attractive on Christmas day, Curtin advises.

Color is no indication of freshness. There is no easy way to tell whether a tree is fresh, says the forester. But you can usually expect locally grown trees to be fresh. You will improve the appearance as well as the safety of Christmas trees if you begin with a fresh tree and keep it in a holder with a good supply of water. For safety's sake, keep tree well supplied with water at all times, Curtin cautions.

Low temperatures cause the foliage and small branches to become brittle. Don't confuse this frozen condition with dryness. But since frozen trees are difficult to handle,arrange to pick up your tree during periods of moderate temperatures, Curtin advises.

Illinois Christmas tree growers this year are also offering bundles of green branches, wreaths, evergreen rope, door swags, pine cones, centerpieces and table decorations.

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12/1/64

Extension Editorial Office
College of Agriculture
University of Illinois
Urbana, Illinois

FOR IMMEDIATE RELEASE

CUTLINE: U. Of I. Christmas Tree Demonstration

The pictures on the right and left are of the same Christmas tree. However, the right-hand picture was taken 12 seconds later than the one on the left. The center picture shows what happened in between. University of Illinois safety specialists set the tree on fire to demonstrate the danger to homeowners who don't saw off the butt end of the family Christmas tree and keep it watered. Watered trees in the same U. of I. demonstration were slow to ignite and showed little fire damage to foliage at the end of the test.

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12/1/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Midwest Cattle Feeders Must Change Methods To Meet Market Demands

The midwestern cattle feeder is often typed as one who buys high-quality cattle and feeds large amounts of corn to obtain heavy weights, aiming for finished grades of Choice or higher.

This description is still true of many feeders in the area, says Roy N. Van Arsdall, USDA farm production economist at the University of Illinois. But with new and significant patterns emerging in feedlot management, these farmers will need to give up long-established feeding programs and adopt more current practices to meet present market demands.

The trend is generally toward lighter market weights of 1,000 to 1,100 pounds and grades that avoid excessive waste, according to research Van Arsdall recently reported. Too many producers still aim for heavier weights and higher finishes, he says. The fall and winter of 1963-64 found some cattle weighing as much as 1,200 to 1,500 pounds in Illinois feedlots. Low prices for market cattle, cheap feed and high replacement costs encouraged this practice.

The cost of additional gains at these heavier weights is high, and the market price for higher finish does not warrant the expense, Van Arsdall believes. In 1958 the price spread between Prime and Choice was as much as five to six dollars, but more recently the two grades have sold for the same price.

Many midwestern farmers are emphasizing feeding programs designed to make money under present conditions, Van Arsdall says. Top weights are being shaded back, and farmers are often feeding a type of

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cattle unfamiliar to them as feeder animals. For example, 22 percent of the cattle on feed in Michigan in January 1964 were dairy beef.

Illinois farmers now produce about 40 percent as many feeders as they buy outside the state. Some of these calves will be fed on the farms where they were raised, but many will enter the market as feeders.

Native production of feeder cattle should benefit feedlot operators through lower transportation costs, less shrinkage and fewer shipping hazards because of long hauls and environment changes. Added benefits are the availability of cattle and convenience of personal inspection in assembling uniform herds, Van Arsdall says.

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12/4/64

FOR IMMEDIATE RELEASE

Illinois' Ability To Produce Feed Increases Feeder Cattle Potential

There is a tremendous potential for producing feeder cattle in Illinois because of the state's feed-growing ability, according to Roy N. Van Arsdall, USDA farm production economist at the University of Illinois.

Large supplies of unused roughages, particularly crop by-products, offer an opportunity for more expansion in beef herds in heavy corn-producing areas than has occurred since 1951, Van Arsdall believes.

Corn yields are growing rapidly because of improved varieties, use of fertilizers, weed and insect controls, better cultural practices and new harvesting techniques, Van Arsdall says. In 1963 the average yield was 80 bushels an acre, with the better corn lands consistently turning out over 100 bushels. Beef cattle will be the major users of this expanding production.

Corn produces more feed value per acre than any other grain crop in the area, Van Arsdall points out. And when the crop is harvested as whole plant silage, the nutrient feeding value is about 1.5 times as great as that in the grain alone.

Harvesting the crop as silage also maximizes production per acre and makes it possible to plant longer season, higher yielding varieties. In addition, under price relationships in recent years, the feed cost of 100 pounds of gain is much less when cattle are fed a ration heavy in grain, Van Arsdall says.

Because of the rapid shift to field shelling, cattle feeders are also increasing the use of high-moisture corn. As feed for cattle, it is at least as effective as dry shelled corn.

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Much of the land in the Midwest is kept in grasses and legumes, which are fed to beef cattle. A higher yield of quality feed can now be obtained by harvesting and storing forage crops than by pasturing them, Van Arsdall says.

Condensing forages by pelleting or wafering to permit dry storage in low-cost structures holds promise, but longer field drying is needed, increasing the possibility of problems due to weather, Van Arsdall says.

Low-moisture, grass-legume silage, called haylage, offers the greatest promise as an effective, efficient way to handle forage crops for cattle, Van Arsdall believes.

Cattle feeders are using more mechanical equipment for processing and handling both roughages and concentrates. This increased mechanization makes it possible for one man with newer types of electric-powered and mobile equipment to handle the chores for as many as 1,200 to 1,500 long-fed cattle or 2,500 to 3,000 short-fed cattle, Van Arsdall says.

Mechanization of feed handling also encourages more efficient use of facilities and greater production through year-round feeding because it permits cattle feeding to compete with field work without adding to the labor force.

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12/4/64

FOR IMMEDIATE RELEASE

Aim Of Dairy Support Program Should Be To Discourage Excessive Milk Production

A clear-the-market concept under which farmers produce an adequate, but not excessive, supply of milk each year should be the objective of the dairy price support program, according to Roland W. Bartlett, University of Illinois dairy marketing specialist.

"It is in the enlightened self-interest of dairymen in Illinois and throughout the United States to maintain support prices for butter and cheese at a level that will prevent drastic yearly price changes and will not encourage milk production far in excess of market demand," Bartlett says.

Farmers tend to adjust their operations to products giving them the highest net return, Bartlett says. This trend is evident in changes in the demand and prices for meat and butter during the past 30 years. Increased per capita consumption of meat in the U. S. has produced relatively high meat prices, while decreased use of butter has brought lower butter prices.

Farmer response to price is reflected in changes in the amount of government purchases after price support changes, Bartlett says. Each increase in price supports from 1949 to 1964 has been followed within two years by an increase in milk production. In contrast, each reduction in price supports has brought a reduction in government purchases of butter and cheese.

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For example, after supports were reduced from 90 to 77 percent in 1949, government purchases fell from 2.2 percent of total production to less than 0.10 percent by 1951. After support prices increased from 77 percent in 1950 to 91 percent in 1952, government purchases increased to 8.6 percent of total milk production by 1953.

In 1960 and 1961 a sharp increase in government purchases followed a price support increase. In 1962 the government bought 8.5 percent of the total milk production, over three times that of 1959 and 1960.

With the parity price at 75 percent, government purchases decreased to 6.1 percent by 1963. Price support purchases in 1964 are estimated to be 5.6 percent of total production, Bartlett reports.

Although present government purchases of butter and cheese are above those of 1959 and 1960, government purchases will probably continue to decrease if present price supports are not increased, particularly if higher beef prices encourage culling. Such a decrease will tend to use most of the yearly milk production, and thus achieve the objective of the commercial market, Bartlett believes.

This goal should be possible without lowering supports below 75 percent and without sacrificing total farmer income, Bartlett adds. Between 1950 and 1960, total milk production in Illinois decreased from 5.2 billion pounds to 4.2 billion pounds. However, total income to Illinois farmers increased from about 1.9 billion dollars in 1950 to 2.15 billion dollars in 1960.

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12/4/64

FOR IMMEDIATE RELEASE

UI Winter Short Course Set For February 1 - March 12

URBANA--The 1965 University of Illinois Winter Short Course in Agriculture is set for February 1 - March 12 on the U. of I. campus in Urbana.

The annual six-week course is designed to give young farmers who cannot regularly attend college a chance to learn the latest in farming ideas and methods.

Short course supervisor Warren Wessels says young farmers who attend the short course can choose from 24 courses in the areas of agricultural economics, agricultural engineering, agronomy, animal science, dairy science, horticulture, turf and park management and veterinary medicine.

All short course instructors are college professors, prominent in their fields of study and up to date on the latest research findings.

"The short course offers young farmers an opportunity to become regular college students for their six-week stay on campus," Wessels explains. "U. of I. athletic events, dances, concerts and other activities offered to the regular students are featured on the social side of the short course."

Wessels points out that short course enrollment over the years has provided an annual gauge of the increasing importance young Illinois farmers are placing on the need for developing technical and management skills to compete in today's modern agriculture.

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Enrollment for the 1964 short course was 132 students.

Wessels believes the short course and other events like it have an important role to play in today's modern agriculture.

"The need for technical and management skills becomes more obvious each year as the number of farms decreases and size of farming operations increases," Wessels explains. "The short course is designed to help give young farmers those skills--to supplement their high school training and on-farm experience."

Cost of the short course will range from $225 to $290, depending on the courses and housing accommodations the individual student chooses.

Wessels urges prospective students to check with their local bankers about a possible $100 scholarship. The Illinois Bankers Association has encouraged its member banks to award scholarships to selected students living in their trade areas. Last year Illinois banks and county federations awarded 54 scholarships.

The Illinois FFA Foundation also is offering twenty $50 scholarships. They will be given to active FFA members who can meet short course requirements.

For further short course information, write to Warren Wessels, Short Course Supervisor, 104 Mumford Hall, College of Agriculture, Urbana.

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12/4/64

FOR IMMEDIATE RELEASE

Illinois 4-H Dairy Judges Win 1st At International

URBANA--The Illinois 4-H Dairy Judging Team won 1st place honors in judging against teams from nine other states this week (Dec. 2) at the International Livestock Exposition in Chicago.

Team members are Larry Bonebright, 17, Lena; Kenneth Hails, 17, Texico; Kenneth Kahle, 17, Wauconda; and Dianne Miller, 18, German Valley. Team coach is Jerry Cash, University of Illinois extension dairy scientist.

In winning the annual contest, the Illinois team placed 1st in judging Brown Swiss and Jerseys, 2nd in Guernseys and 4th in Holsteins.

Hails was 2nd high individual in the contest. He placed 1st in Holstein, 2nd in Guernsey, 4th in Brown Swiss and 7th in Jersey judging.

Miss Miller was 8th high individual in the contest. She placed 5th in judging Jerseys and 9th in Guernseys. Kahle was 9th high individual, placing 3rd in both Brown Swiss and Jersey judging.

Members of the Illinois 4-H team are the survivors of an original group of more than 2,000 Illinois 4-H'ers who worked to make the team.

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12/4/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR RELEASE FRIDAY P.M.,
DECEMBER 11, 1964

UI Sheep Day Coverage

Management Is Important Key To Sheep Flock Profits

URBANA--A summary of 1963 production records for 74 Illinois sheep feeding operations showed that some flocks actually returned three times as much gross income per ewe as others.

"Income ranged from a high of $44.54 per ewe to a low of $13.75," University of Illinois extension sheep specialist Gary Ricketts said today during the annual Illinois Sheep Day Program on the U. of I. campus. "Ten of the 74 flocks returned more than $35.00 gross income per ewe."

Why were there such large differences in income? Ricketts said that question could be answered in one word--management. He outlined the following management and production differences among the flocks in the study:

1. In some flocks, 20 to 25 percent of the ewes failed to lamb.

2. Lamb crop percentage ranged from a high of 207 percent to a low of 99 percent.

3. Death loss from birth to weaning ranged from a high of 73 percent to a low of zero.

4. Wool production per ewe ranged from a low of 6 to 7 pounds to a high of 13 to 14-1/2 pounds.

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5. Some lambs were marketed at 120 pounds, and others at 70 pounds.

6. The lambs sold for prices ranging from as high as 24 cents a pound to as low as 14 cents.

Ricketts said these figures show conclusively that sheep flocks can make good money in Illinois.

"However, too many Illinois flocks never have a chance for profit because they are used merely as fence-row scavengers and are given little management consideration," he explained.

The U. of I. specialist outlined a number of practices that are important to building a profitable sheep enterprise.

"Selection of the stud ram is a major key to maximum flock profits," Ricketts explained. "Yet this is an area in which many flock owners are most negligent."

Ricketts said production records also are extremely important. They help to measure flock productivity, identify high-producing and low-producing ewes and aid in evaluating ram performance.

Feeding concentrates to ewes during late pregnancy and early lactation is also important. Approximately two-thirds of the birth weight of a developing fetus is attained during the last six weeks of pregnancy.

Ricketts said the fact that 80 to 90 percent of lamb death losses occur within the first month of life points up the need for good management at lambing time. He said that prompt treatment of sickness, marketing at weights between 85 and 105 pounds and effective control of parasites are other management factors that hold the key to maximum returns from the sheep flock.

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HDN:ml
12/8/64

FOR RELEASE FRIDAY P.M.,
DECEMBER 11, 1964

UI Sheep Day Coverage

18 To 19 Percent Protein Rations Best For Early-Weaned Lambs At UI

URBANA--Eighteen to 19 percent protein rations seemed to promote maximum gains and best feed efficiency for early-weaned lambs in a recent University of Illinois study. Lambs in the study were weaned at 50 pounds.

The early-weaning experiments were described today by animal scientist Frank Hinds during the annual Sheep Day program on the U. of I. campus.

Hinds outlined two experiments that were aimed at finding the optimum protein level for early-weaned lambs. In the first experiment, lambs were fed crude protein at levels of 13, 16.2, 19.1 and 22.1 percent. Lambs in the second study received rations containing 15.4, 18.4 and 21.5 percent crude protein. All lambs were individually fed in pens on elevated platforms.

In the first experiment, boosting the protein level from 13 to 16.2 percent produced a highly significant increase in gain and reduced feed required per pound of gain. Higher protein levels increased gains, but not significantly.

In experiment two, boosting protein from 15.4 to 18.5 percent caused a highly significant increase in gain and also significantly lowered feed required per pound of gain.

Hinds said data pooled from both experiments indicated that 17.7 percent protein promoted maximum gains and 19.1 percent protein gave most efficient gains.

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HDN:ml
12/8/64

FOR RELEASE FRIDAY P.M.,
DECEMBER 11, 1964

UI Sheep Day Coverage

Adequate Feeder Space Important For Lambs Fed Urea

URBANA--A recent University of Illinois "on-the-farm" sheep feeding experiment appears to point up the importance of adequate feeder space for feeder lambs fed diets containing urea.

Researcher J. S. Teuscher explained the research today during the annual Illinois Sheep Day program on the U. of I. campus. More than 800 lambs on the Melvin Teuscher farm near Fisher were involved in the experiment.

U. of I. sheep researchers used the lambs to compare a 50 percent urea--dehydrated alfalfa meal protein supplement with a 50 percent soybean meal supplement and a 32 percent commercial supplement that had been used on the Teuscher farm.

The lambs performed exceptionally well (and about equally) on all three supplements. However, there appeared to be more poor-doing lambs on the urea-dehy supplement. Teuscher said researchers believed this might be due in part to lack of feeder space.

Only enough feeder space was available to handle 12 lambs per linear foot. Observations during the daylight hours indicated that this was not enough space. There was continuous competition around the feeders.

Past U. of I. studies have shown that urea nitrogen utilization is improved by feeding several times daily. The lack of feeder space would affect lambs that could not effectively compete for available space, since they could eat only once or twice daily.

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Teuscher said daily gains averaged 0.56 pound on the urea-dehy supplement compared with 0.58 and 0.59 pounds respectively for the soybean meal and commercial supplements.

Feed conversion for all three supplements averaged about six pounds per pound of gain. Costs were essentially the same for the urea-dehy and soybean supplements at 12.9 cents a pound and were slightly less for the commercial supplement.

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FOR RELEASE FRIDAY P.M.,
DECEMBER 11, 1964

UI Sheep Day Coverage

Breeding Ram Production Records Are Important

URBANA--A recent University of Illinois sheep breeding research project emphasized the importance of accurate production records in evaluating rams.

Animal scientist B. B. Doane outlined the research in an information packet which was distributed at today's Sheep Day Program on the U. of I. campus. He said researchers randomly assigned 75 six-year-old northwestern ewes to six U. of I. rams. Close performance records were kept on the resulting lambs.

Here are some of the differences in performance passed along by the rams to their offspring:

One ram sired the largest lambs at birth and the fastest gaining lambs to weaning. However, his lambs showed the slowest gains after weaning.

Lambs from another ram showed the most consistent growth rate both before and after weaning. However, these lambs graded approximately one-third grade lower in the carcass than lambs sired by the other rams in the study.

Doane said the study also showed considerable differences among rams in number of multiple births. One ram sired only one set of multiples from nine ewes. In contrast, another ram sired six sets of multiples from eight ewes.

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To further complicate matters, the ram that sired only one set of multiples produced lambs that showed the fastest gains and cut the highest percent of loin leg, rack and shoulder and the largest loin-eye area per 100 pounds of carcass weight of any lambs in the test.

Speaking later in the program, extension animal scientist Gary Ricketts said that selection of a stud ram is the area in which many flock owners are most negligent, even though good rams can contribute to rapid progress in flock improvement.

Ricketts said sheep producers can't expect to buy an outstanding sire for market price. He advised sheepmen to select rams that are sound and growthy, have good conformation and are heavy shearers. Preference should be given to rams that have performance records and are of multiple birth.

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12/8/64

FOR IMMEDIATE RELEASE

Sociologists Should Study Urbanization Of Rural Life

URBANA--The world-wide issue of urbanization of rural life should receive vigorous attention from rural sociologists in the decade ahead.

Further knowledge of this subject would be an important contribution to both developing and developed nations, according to Paul A. Miller, president of West Virginia University, who addressed a recent University of Illinois rural sociology seminar.

Rural sociologists, with their knowledge of the shift taking place in community life, are in a strong position to make such a study, Miller said.

Illinois, in the agricultural heart of the country and with large urban areas as well, provides a natural setting for a study of this type, Miller added.

The question that is making rural sociology a world sociology is how to substitute knowledge for tradition in human action in all societies, Miller pointed out.

If international development is to take place, the number of people in agriculture must be reduced, Miller said, because the past shows that economic development is synonymous with the shift from agrarianism to industrialism.

"Rural sociologists have an obligation to interpret what has happened in agricultural shifts in the U. S.," Miller said. "Except for great discoveries in the health sciences and physics, there is no better example of the power of science and technology to transform than is found in agriculture in the U. S."

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Both the advanced and developing nations face great technological changes. Rural sociologists of the U. S. may best interpret these changes because of their experience in working with American agriculture, Miller believes.

"Technology has produced a world that includes at the same time the most hate and destruction and the most compassion and progress in history," Miller said. "Many people have died because of technological war, but millions have lived because of technological medicine."

The same paradox exists in American rural life, he added. The efficiency of U. S. agriculture is the envy of the world, and yet most rural regions have many examples of poverty, lack of educational facilities and unemployment.

In outlining the development of rural sociology, Miller recalled that the shortcomings of rural life were of primary interest to those in the field 50 years ago. Later the view shifted to the effectiveness of rural institutions, and then to education, health and welfare. More recently interest has centered on the influence of mobility on rural population, occupational hopes, use of manpower and family adjustment.

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12/8/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

UI Sheep Day Coverage

Dehy-Urea Supplements Comparable To Soybean Meal In U. Of I. Tests

URBANA--University of Illinois ruminant research has shown that dehy-urea supplement combined with stilbestrol implants can produce lamb gains as efficiently as soybean meal in a corn-and-cob-meal finishing ration--and may offer potential savings of about $20 per ton of supplement.

Animal scientist John Teuscher reported the research during the Illinois Sheep Day program on the U. of I. campus. He said the study was designed to compare growth rates and feed efficiency of ruminants fed soybean meal supplement or dehydrated alfalfa meal—urea supplement.

"The lambs receiving the diet supplemented with soybean meal gained 0.45 pound per head daily compared with 0.46 pound for lambs receiving dehy-urea," Teuscher explained.

Lambs receiving the diet containing soybean meal ate slightly less feed daily than lambs receiving the other two supplements and required somewhat less feed per pound of gain.

Teuscher said half of the lambs on each supplement were implanted with stilbestrol. The implanted lambs gained 17 percent faster than lambs that were not implanted. They also graded slightly higher. No difference was observed in dressing percent or cooler shrink.

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Teuscher pointed out that the economic potential of the dehy-urea supplement was obvious even though it required about 5 percent more feed per pound of gain than soybean meal.

"The ingredient cost was between $20 and $30 per ton less for dehy-urea supplement used in the study than for soybean meal," Teuscher explained. "Therefore, the dehy-urea reduced the cost per unit of gain, especially when the lambs were implanted with stilbestrol."

U. of I. animal scientists note that dehy-urea supplements offer a potential for increasing the management flexibility of the feeding operation. The new supplements may offer the good manager an alternative to soybean meal when soybean prices are relatively high.

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12/11/64

FOR IMMEDIATE RELEASE

Cattle Feeders Question Shelter Because Of Housing, Bedding Costs

URBANA--Cost of housing and bedding is causing many farmers to take a closer look at long-accepted ideas of shelter beef cattle need in midwestern feedlots.

The recent unprofitable position of beef feeders is creating a more conservative attitude toward investments, according to Roy N. Van Arsdall, USDA farm production economist at the University of Illinois. Farmers are questioning what is essential for a functional beef-feeding system and what is merely the result of custom or convenience.

Investment per head space averages $25 to $40 for an open-front shed when the usual 25 to 30 square feet of shelter space is provided for each animal, Van Arsdall says. Costly materials and more elaborate construction can increase the investment considerably.

Producers in the drier western part of the area have used minimum shelter for many years. Now the substitution of shades and windbreaks for enclosed buildings is being tried in the central area.

High cost and shortage of good bedding materials are putting pressure on traditional cattle housing and manure handling methods, Van Arsdall reports. Cattle feeders and dairymen must often pay as much for bedding straw as for good-quality hay.

Oats, the chief source of straw, are being replaced in the rotation because they are unprofitable. Field shelling of corn and increased use of high-moisture ground ear corn for feed is reducing the supply of corncobs for bedding as well.

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Cattle feeders are trying to lower bedding needs by using slotted-floor barns, liquid manure storage and individual stalls and by cleaning unbedded paved floors frequently.

One way to combat the cost of housing and bedding, Van Arsdall points out, is to do without both. The major concern then is to keep the cattle reasonably dry and out of the mud.

The problem of manure handling and disposal has been acute in the few large feeding operations now in the central area. However, much of the manure does not get to the cropland and does not contribute to the farm business as it does on the typical small farm, Van Arsdall says.

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JAP:ml
12/11/64

FOR IMMEDIATE RELEASE

UI Sheep Day Coverage

Report "All-In-One" Silage At U. Of I. Sheep Day

URBANA--The potential for fully automating lamb feeding operations may have received a boost as a result of recent University of Illinois feeding experiments with "all-in-one" silage diets.

Results of the study were reported by U. of I. animal scientists in an information packet distributed during the annual Illinois Sheep Day program.

Under the all-in-one silage system, concentrates and other feed ingredients are added to the forage at ensiling time. U. of I. researchers compared this system with rations in which concentrates were added to silage at feeding time.

In the same study, the Illinois scientists also compared rations containing soybean meal, urea or biuret as the crude-protein source. Biuret is a product formed by heating urea to high temperatures.

"The study showed that biuret added at ensiling time gave about the same daily gains and feed efficiency as soybean meal added to the silage at feeding time," the U. of I. specialists reported. "Gains and efficiency were somewhat less for urea added at ensiling time."

Lambs receiving the all-in-one silage concentrate (567 pounds ground corn, 10 pounds calcium carbonate and 5 pounds trace-mineralized salt) with biuret added showed average daily gains of .42 pound and required 6.28 pounds of feed per pound of gain.

Gain for soybean meal added at ensiling time was .44 pound daily, with 6.32 pounds of feed needed per pound of gain.

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12/11/64

FOR IMMEDIATE RELEASE

UI Lamb Study Shows Advantage For Steaming Cracked Corn

URBANA--Water-soaking rations for lambs had no effect on gains, feed efficiency or live grade in recent University of Illinois tests.

Similar studies did show a feeding advantage for steaming cracked corn in the lamb ration.

Results of both tests were reported by animal scientist B. B. Doane in an information packet that was distributed at the annual U. of I. Sheep Day.

Doane said lambs that received steamed cracked corn in the 67-day study gained 12 percent faster on 1/2 pound less feed per pound of gain than lambs fed cracked corn that was not steamed.

The steamed corn was treated for 10 minutes at approximately 190 to 200 degrees F.

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12/11/64

FOR IMMEDIATE RELEASE

Trust Farm Bean Acreage Up; Yields Down

MONTICELLO--Although this year's 1,407 acres of soybeans on the University of Illinois Allerton Trust Farms near Monticello represents the highest acreage ever harvested, the yield dropped considerably from last year's record-breaking 40.5 bushels per acre, reports University Trust Farm manager D. G. Smith. This year's average yield, at 32.7 bushels per acre, was 19 percent lower than last, he adds.

Frank Lubbers, Jr., again had the highest yield with 38.5 bushels per acre, Maurice Beckhart was second with 35.9 bushels and Burgess Allen was third with 34.9 bushels. Lubbers has been high-yield winner in six of the past seven years. He used 30-inch row widths and planted 1-1/2 bushels per acre. Most of the other Allerton Trust farmers used 38-inch or modified 38-inch rows, Smith reports.

Extremely low rainfall during May apparently accounted for some of this year's lower yields. Amount and distribution of rainfall for June, July, August and September were quite similar to normal, but April rainfall was 4.69 inches more than normal and May was 2.81 inches less than normal. Only .33 inch fell during May.

Dry weather at planting time caused soybeans to come up unevenly. Uneven growth made mechanical weed control difficult. Dry weather at planting time affected and almost nullified the effect of chemical weed control.

Some of the difference in yields can be explained by the quality of the soil, but weed control helped the three top producers, who also had the cleanest fields. U. of I. research by agronomist Ellery Knake shows that just six giant foxtail plants per foot of row can reduce soybean yields 10 percent. Good management can keep weed losses to a minimum, advises Smith.

Adams, Clark 63, Harosoy, Harosoy 63 and Lindarin were grown on the trust farms this year. The variation in yield between farms was considerably greater than the variation between varieties.

The farms produced over 657 acres of certified and registered soybeans this year.

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12/11/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

New Soybean Varieties Edge Old Favorites In UI Trials

URBANA--Yield records from the 1964 Illinois soybean trials show several new varieties taking top honors. Varieties like Wayne, Kent, Clark 63 and Chippewa 64 were among the front-runners, rivaling such long-time favorites as Harosoy, Shelby and Clark, reports University of Illinois agronomist W. D. Pardee.

The USDA Regional Soybean Laboratory at Urbana carries on these tests at a number of locations in the state, ranging from DeKalb county in the north to Alexander in the south.

Kent led the southernmost test, just as it has for several years. In other southern Illinois trials, Clark 63 and Wayne joined Kent as test leaders. Clark 63 has been a test-topper for several years, says Pardee. It is similar to its namesake, Clark, but has resistance to Phytophthora rot and bacterial pustule.

In south-central and central Illinois, newcomer Wayne topped every test. At Urbana, Wayne yielded three bushels more than its closest rival. Farmers will be hearing more about this variety, says Pardee. The new release matures about the same time as Shelby. Wayne's stem strength and seed quality are no improvement over existing varieties, but it beats them all in yield. Growers will be increasing seed this summer. The first certified seed will be available for planting in the 1966 season, says Pardee.

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This summer's drouth conditions hurt early varieties in south-central Illinois. Long-time favorite Harosoy and its new counterpart, Harosoy 63, were no exceptions. Following a month of drouth, several days of 100-degree-plus temperatures hit these varieties at blossom time. Later varieties escaped injury, took advantage of August rains and generally yielded well.

Throughout most of central Illinois, Harosoy 63, Hawkeye 63 and Lindarin 63 equaled or bettered their namesakes. Phytophthora rot wasn't really a problem this summer, since this disease hits hardest under moist conditions. Their bred-in Phytophthora resistance therefore produced no benefit this year.

In past years, Harosoy 63 has matured about a day or earlier than Harosoy. This year heat and drouth widened the gap noticeably. In some south-central counties, the 63's, being earlier, suffered more from both drouth and scorching temperatures than the standard varieties. If drouth and heat had hit later in the season, then the later varieties would have suffered, says Pardee. Long-term averages still show the 63's yielding just as well as their namesakes until Phytophthora hits. Then the 63's pull ahead. Even this year this pattern held through most of central and north-central Illinois.

In northern Illinois trials, two newcomers hit the top. Chippewa 64, a Phytophthora-resistant version of Chippewa, performed well in the DeKalb county trial. Another variety that farmers will hear more about is A-100, which topped the test at Dwight and edged out Chippewa 64 at DeKalb, though both ran behind Harosoy. Seedsmen are increasing

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seed of A-100. There will be limited amounts of certified seed for sale this spring. A-100 matures several days earlier than Harosoy. Both A-100 and Chippewa 64 appear to be well adapted to northern Illinois.

It pays to be looking for better varieties as they appear, says Pardee. His advice: "Choose those that seem best adapted to your area, and compare them side by side with the variety you are now growing. The real test is how many beans a variety will put into your hopper."

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WDP:JJF:ml
12/15/64

FOR IMMEDIATE RELEASE

Illinois Pork Producers Conference Set For January 9 In Pekin High School

A program featuring talks by University of Illinois specialists, pork industry representatives and some of the Midwest's top swine producers has been set for the annual Illinois Pork Producers Conference January 9 on the east campus of Pekin High School in Pekin.

Highlight of the program is a series of four workshops on swine feeding and nutrition, swine housing and equipment, breeding and selection and pork processing and merchandising. The workshops are scheduled so that participants can attend at least two sessions.

Registration for the program begins at 9:00 a.m. and will be followed at 10:00 a.m. by a general session chaired by James Monier, president of the Illinois Pork Producers Association.

A registration fee of $2.50 will cover the cost of the noon luncheon, which features talks by Robert Schneider, Illinois Secretary of Agriculture, and James Peterson, president of the National Swine Growers Council.

The four afternoon workshops begin at 1:30 p.m. The feeding and nutrition session will take a look at the future of the swine business from the standpoints of industry, university research and the producer.

The housing and equipment workshop features talks by commercial pork producers and U. of I. agricultural economists. A review of testing programs for stock producers and a description by two outstanding producers of their swine breeding programs highlight the breeding and selection workshop.

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The workshop on pork processing and merchandising features talks on new ideas in promoting pork consumption and processing pork in the future.

A special program will be held for wives of producers who attend the meeting. Highlight of that session is a demonstration of pork cookery by Miss Elizabeth Lahmeyer, assistant director of home economics for the National Livestock and Meat Board.

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12/15/64

FOR IMMEDIATE RELEASE

UI Custom Spray School Set For January 20-21

URBANA--The 17th annual Custom Spray Operators' Training School will be held January 20-21 in the Illini Room of the Illini Union Building on the University of Illinois campus in Urbana.

Custom spray operators, representatives from industry, farm advisers and other interested persons will attend the two-day meeting to hear research and extension specialists from the USDA, Illinois and neighboring states discuss pesticides, spray equipment and insect, disease and weed control.

Subjects to be covered during the two-day meeting will include the new corn virus disease found in southern Illinois this year. Two specialists from the USDA, Dr. C. C. Bleckenstaff and Ken Messenger, will discuss "Alfalfa Weevil and Its Biology and Control in the United States" and "Low-Volume Concentrate Spraying." Dr. Don C. Peters, entomologist from Iowa State University, will discuss recent research on the control of the western corn rootworm and cutworm in Iowa, and U. of I. entomologists George C. Decker and J. H. Biggers will discuss "Occurrence and Dissipation of Aldrin in Soil" and "Northern Corn Rootworm Resistance and Control in Illinois."

The program will begin at 10 a.m. on Wednesday, January 20.

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12/15/64

NEWS FROM AGRICULTURE

UNIVERSITY OF ILLINOIS   COLLEGE OF AGRICULTURE   URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Ag. Industries In Decade Ahead Is Theme For 1965 U. Of I. Forum

Agricultural industries in the decade ahead is the theme of the University of Illinois Agricultural Industries Forum February 2-3, reports Harold G. Halcrow, head of the U. of I. Department of Agricultural Economics.

Governor Otto Kerner of Illinois will speak on "Expanding the Illinois Economy" at a luncheon meeting February 3.

The topic for the general session on February 2 is "The Market for Agricultural Industries." Participants in the discussion of markets for farm products, machinery, supplies and services will be George L. Mehren, assistant secretary of agriculture, USDA, Washington, D. C.; Lester S. Kellogg, director of economic research, Deere and Company, Moline; and Dale E. Butz, director of research, Farm Services, Inc., Bloomington.

"Manpower Needs and Training for Agricultural Industries" will be discussed at the February 3 general session. The following speakers will describe various phases of education in rural and urban areas, the agricultural industries curriculum in colleges and in-service training in agricultural industries: M. R. Karnes, U. of I. professor of vocational and technical education; R. J. Mutti, U. of I. professor of agricultural economics; and Robert Mather, vice-president and sales manager, Babson Bros., Inc., Chicago.

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Special sessions are scheduled for those interested in dairy marketing, egg and poultry marketing, grain marketing, livestock marketing and feed, equipment and chemical industries.

Registration and all Forum sessions will be in the Illini Union Building. J. R. Roush, U. of I. agricultural economist, is general chairman for the 1965 Forum. A complete Forum program is available from the University of Illinois Department of Agricultural Economics, 305 Mumford Hall.

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JAP:ml
12/18/64

FOR IMMEDIATE RELEASE

Cows In Top DHIA Herds Have Average Dry Period Of Six Weeks

URBANA--A recent University of Illinois study of DHIA records showed that cows in well-managed herds can be kept milking at least 85 to 90 percent of the time.

"That's a dry period of about six to seven weeks," explains U. of I. dairy scientist Leo Fryman. "And under excellent management, even shorter dry periods are adequate."

Fryman said herds in which cow dry periods averaged three to six weeks showed top milk production in the study. They made up about one-fourth of the state's DHIA herds.

"Dairymen who owned these herds kept their cows milking at least 88 percent of the time," Fryman explained. "This means dry period length averaged six weeks or less.

"The herds were well-fed and no doubt benefited from excellent management because they averaged more than 12,000 pounds of milk and 480 pounds of butterfat per cow for the 1964 testing year."

The U. of I. dairy specialist said herds with cows milking 83 to 87 percent of the time had the next highest average Illinois DHIA production with 11,962 pounds of milk and 457 pounds of butterfat.

Cows in the 294 remaining herds were allowed to stand dry for nine or more weeks. Average production was 10,690 pounds of milk and 407 pounds of butterfat.

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12/18/64

NEWS FROM AGRICULTURE
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE URBANA, ILLINOIS

FOR IMMEDIATE RELEASE

Farm Supply Industries Included In 1965 UI Forum Sessions

The role of capital in the growth of agriculture and agricultural industries will be emphasized in special sessions at the University of Illinois 1965 Agricultural Industries Forum on February 2-3, report R. J. Mutti and J. E. Wills, U. of I. agricultural economists.

The feed, equipment and chemical industries sessions will feature experts discussing how independent dealers and manufacturers qualify for long-term loans, how petrochemical companies provide capital for fertilizer distribution and purchase by farmers, and how large commercial banks and local banks work together to meet unusual credit needs.

Speakers will include E. F. Dickey of the E. F. Dickey Company, Chicago; K. W. Cross, marketing manager, Tuloma Gas Products Division, Standard Oil Company of Indiana; and I. Frank Green, vice-president, Commercial Bank, Peoria.

To provide background for this discussion, U. of I. agricultural economist G. K. Brinegar will describe the overall structure of capital markets serving agriculture.

The extent of and widespread interest in the leasing of farm equipment and buildings will be appraised at the Tuesday evening session by Claude W. Gifford, associate editor of Farm Journal, with additional comments by Charles R. Brynteson, director of financial relations, A. O. Smith Harvestore, Inc.

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An evaluation of the efficient use of capital will be made at the Wednesday morning meeting. J. M. Holcomb, U. of I. farm management and finance specialist, will discuss the subject as it concerns farm enterprises. William Morris of the International Harvester Company, Chicago, will relate the subject to retail distribution.

General sessions will also feature speakers from the farm supply industries at a Tuesday morning meeting on "The Market for Agricultural Industries." Lester S. Kellogg, director of economic research, Deere and Company, will discuss markets for farm machinery. Dale E. Butz, research director, FS Services, will present markets for farm supplies and services.

Governor Otto Kerner of Illinois will speak on "Expanding the Illinois Economy" at a luncheon meeting on Wednesday.

A complete forum program is available from the University of Illinois Department of Agricultural Economics, 305 Mumford Hall, Urbana. All forum sessions will be in the Illini Union Building.

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FOR IMMEDIATE RELEASE

Livestock Marketing Sessions Planned For Ag Industries Forum

Livestock supplies and market demand, futures market for meats, lean meat yields of cattle and hogs, and cuttability of livestock marketing sessions of the University of Illinois 1965 Agricultural Industries Forum on February 2-3.

M. B. Kirtley, livestock marketing economist, announces this program:

"Balancing Livestock Supplies With Market Demand" will be discussed Tuesday afternoon by Thomas Peeler, plant manager of Swift and Company, Rochelle, and Gene Turner, executive vice-president, Stark, Wetzel and Company, Indianapolis. Everette B. Harris, president, Chicago Mercantile Exchange, will speak on "The Growing Practicality of Futures Markets for Meats and Meat Animals."

A tour of the U. of I. Central Foods Stores to observe research in progress on meat cuttability is planned for Wednesday morning.

B. C. Breidenstein, U. of I. associate professor of meat technology, will discuss "Criteria Indicating Lean Meat Yields of Cattle and Hogs." R. O. Nesheim, head of the U. of I. Department of Animal Science, will present "Programs to Recognize and Improve the Cuttability of Livestock."

In addition to the special livestock marketing sessions, general sessions on Tuesday and Wednesday mornings will follow the theme "Agricultural Industries in the Decade Ahead." Governor Otto Kerner of Illinois will speak on "Expanding the Illinois Economy" at a luncheon meeting on Wednesday.

A complete forum program is available from the University of Illinois Department of Agricultural Economics, 305 Mumford Hall. All forum sessions will be in the Illini Union Building.

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FOR IMMEDIATE RELEASE

Grain Production And Marketing To Be Featured At U. Of I. Forum

A thorough discussion of grain production, handling and marketing is scheduled for special sessions at the University of Illinois 1965 Agricultural Industries Forum on February 2-3, according to T. A. Hieronymus and L. F. Stice, U. of I. grain marketing economists.

"Operating Adjustments for Field-Shelled Corn" is the theme of the Tuesday afternoon session. Stice will discuss the significance of changes in grain production and marketing. Alfred G. Harms of Cisco will present the farmer's view of the problem of handling field-shelled corn. Ralph Klopfenstein, Klopfenstein Grain Company, Gridley, will discuss country elevator opportunities and problems.

A panel of three specialists will report on experiences in handling the 1964 grain crop. Participants include Bert M. Wise, Blue Mound Grain and Fertilizer Company; Frank Rench, director of member relations, Illinois Grain Corporation, Chicago; and Norman Holzhauer, Holzhauer Grain Inspection Service, Pontiac.

Gearing-up country elevators for adequate handling, conditioning and storage is a topic also planned for the Tuesday afternoon program. Speakers include Leo E. Holman, agricultural engineer, Handling and Facilities Research Branch, Agricultural Research Service, USDA, Washington, D. C.; and Joseph E. Bailey, assistant vice-president, Cargill, Inc., Minneapolis.

Hieronymus will define the price aspects of holding corn at the Tuesday evening session. Frances R. White, grain specialist with F.S. Services, Inc., Mt. Vernon, will discuss rational charges for handling, drying and storing grains.

The theme "Agricultural Industries in the Decade Ahead" will be followed at general sessions Tuesday and Wednesday mornings. Governor Otto Kerner of Illinois will speak on "Expanding the Illinois Economy" at a luncheon meeting February 3.

A complete forum program is available from the University of Illinois Department of Agricultural Economics, 305 Mumford Hall, Urbana. Registration and all forum sessions will be in the Illini Union Building

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FOR IMMEDIATE RELEASE

Egg And Poultry Problems
To Be Reviewed At 1965 Forum

Egg and poultry production and marketing problems are scheduled for intensive discussion at special sessions during the University of Illinois 1965 Agricultural Industries Forum on February 2-3.

R. P. Bentz, U. of I. egg and poultry marketing specialist, announces the following program:

Four speakers will follow the theme "Marketing Requires Producing to Specification" on Tuesday afternoon. Marketing problems in an integrated egg operation will be discussed by Leonard Pullman, Home Juice Company, Chicago; Ernest Brown, Corn Belt Hatchery, Gibson City, will talk about serving market needs with family farms; S. D. Biggs, assistant in agricultural economics, U. of I., will explore the economics of processing eggs on the farm; and L. D. Hill, U. of I. marketing specialist, will discuss interregional competition and the egg industry.

At the Tuesday evening session, discussion will center on marketing problems. Bentz will discuss the plight of the worn-out layer; C. O. Newell of Swift and Company, Chicago, will report on the government's egg buying program; L. O. Voss, University of Missouri agricultural economist, will discuss the impact of change on the egg product industry; and T. A. Hieronymus, U. of I. marketing specialist, will analyze the usefulness of egg futures contracts.

Procurement will be emphasized at the Wednesday morning session when R. J. Williams, Purdue University marketing management specialist, will outline the characteristics of and attitudes toward egg contracting. R. A. Hinton, U. of I. farm management specialist, will explain how to put laying hen records to better use.

Other features of the forum are general sessions on Tuesday and Wednesday mornings based on the theme "Agricultural Industries in the Decade Ahead." Governor Otto Kerner will discuss "Expanding the Illinois Economy" at a luncheon meeting Wednesday.

A complete forum program is available from the University of Illinois Department of Agricultural Economics, 305 Mumford Hall. All forum sessions will be in the Illini Union Building, Urbana.

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FOR IMMEDIATE RELEASE

Dairy Marketing Sessions Scheduled For 1965 UI Ag Industries Forum

Ways to expand markets, the federal milk order program and the use of sterilized concentrated milk will highlight special dairy marketing sessions at the University of Illinois 1965 Agricultural Industries Forum on February 2-3.

Roland W. Bartlett, U. of I. agricultural economist, reports that dairy sessions will also feature discussion of trade barriers, pesticide control as related to milk, and the need for university-trained personnel in the dairy industry.

The Tuesday afternoon session will include these speakers, Bartlett says:

Attorney Sydney Berde, from St. Paul, will discuss breaking trade barriers in the dairy industry; Truman Graf, University of Wisconsin agricultural economist, will outline the market potentials for concentrated milk; Karl Gardner, associate dean of the U. of I. College of Agriculture, will discuss the need for university-trained personnel in the dairy industry; and Sheldon Williams, U. of I. agricultural economist, will discuss food stores as key outlets for dairy products.

Leading executives and specialists of dairies, dairy product firms and universities will also participate in a panel discussion of sterilized milk products at the Tuesday afternoon session.

On Tuesday evening James Reeves, marketing director for Producers Creamery Company, Springfield, and Otie Reed, executive director of National Creameries Association, Washington, D. C., will discuss "What Changes Should Be Made in the Federal Milk Order Program."

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Paul O'Connell, U. of I. milk marketing specialist, will present a program to increase milk consumption in Chicago schools at the Wednesday morning session. F. M. Potter, Continental Can Company, Chicago, will report on consumer reaction to a canned milk concentrate.

In addition, Bartlett will analyze the economic aspects of the federal milk order program, and E. O. Heineman, Pet Milk Company, St. Louis, will discuss recommendations for pesticide control as related to milk production.

General sessions are scheduled for Tuesday and Wednesday mornings on the theme "Agricultural Industries in the Decade Ahead." Governor Otto Kerner of Illinois will speak on "Expanding the Illinois Economy" at a luncheon meeting February 3.

For a complete forum program, write to the University of Illinois Department of Agricultural Economics, 305 Mumford Hall. All forum programs will be in the Illini Union Building, Urbana.

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